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Government
Publications

Industry Strategies
(Abridged)

**Canada's
International
Business Strategy**

1997-1998



Team Canada • Équipe Canada



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Canada's International Business Strategy (CIBS) is at the heart of the Team Canada approach to doing business in the global marketplace. It sets out the international business development strategies for 27 industry sectors.

Strategies that have the greatest chance of success are those that are developed by federal and provincial governments in close collaboration with industry. They must reflect industry's priorities, and incorporate a careful assessment of Canadian strengths and worldwide opportunities.

The sector strategies are the basis upon which the federal and provincial governments will allocate a considerable portion of their international business development resources. Each strategy identifies the primary objectives that government and industry will pursue to help Canadian firms capture emerging global trade, technology and investment opportunities. These objectives, in turn, determine which specific international events and initiatives receive government support.

Individual sector strategies are the product of National Sector Teams (NSTs), groups that bring both private- and public-sector expertise to bear on a range of business issues. NST involvement in the development of CIBS ensures that government initiatives reflect the real needs of Canadian industry. By co-ordinating federal, provincial and industry planning, CIBS reduces overlap and duplication, and directs government resources where they can genuinely make a difference.

This year, two new sectors are included as integral parts of CIBS: Aboriginal Products and Services; and Construction, Architectural and Engineering Services. A further step, under development, will provide greater focus on sectors offering particular opportunities. Action plans for these sectors will be brought forward in the coming months.

CIBS includes:

- Volume 1, the CIBS Overview, consists of two parts: a Strategic Overview summarizing Canada's main international business development and trade policy objectives; and a Geographic Overview identifying key challenges,

priorities and opportunities within each of the world's major geographic regions. Also included is a complete list of Canada's International Trade Centres, from which firms can obtain a variety of services related to doing business abroad.

- Volume 2, Industry Sector Strategies, sets forth the main challenges identified by the NSTs in pursuing international business opportunities, and the strategic directions that government and industry will follow for emerging global trade, technology and investment opportunities. The full text of each strategy, including a brief profile of Canadian capabilities and a snapshot of the international market, is available in electronic format or by fax.
- The CIBS Compendium — International Activities: Federal and provincial governments have agreed to use the sector strategies as a basis for the allocation of resources. A continually updated list of activities designed to implement the sector strategies — known as the evergreen CIBS Compendium — is posted on the Internet. Canadian companies are invited to participate in these events, and are encouraged to contact the department or agency listed for details. The activity lists in abbreviated format, updated quarterly, are also available by fax-back.

We want to hear from you!

CIBS is continually being revised in response to feedback from clients. Your views on how CIBS can be improved are important. If you have comments or questions, or want to find out how to become more actively involved in the CIBS process, please contact the CIBS Working Group at:

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This portion of CIBS contains extracts from the Industry Sector Strategies, which set forth the main challenges that the National Sector Teams have identified in pursuing international business opportunities. Also included are the strategic directions that government and industry will follow for emerging global trade, technology and investment opportunities.

The full text of each sector strategy, including a brief profile of Canadian capabilities and a snapshot of the international market, is only available on diskette, through the Internet, or by FaxLink.

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Strategis: <http://strategis.ic.gc.ca>



All monetary figures in this document are expressed in Canadian dollars unless otherwise indicated.

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Acronyms and Initialisms used in Canada's International Business Strategy

(This list does not include sector-specific references)

ACM	Apparent Canadian Market	IMF	International Monetary Fund
APEC	Asia-Pacific Economic Cooperation forum	ISO	International Organization for Standardization
ASEAN	Association of Southeast Asian Nations	ITAC	International Trade Advisory Committee
BDBC	Business Development Bank of Canada	ITC	International Trade Centre
BOOT	build, own, operate, transfer	MAPAQ	Ministry of Agriculture, Fisheries and Food of Quebec
BOT	build, operate, transfer	MNE	multinational enterprise
CBSC	Canada Business Service Centre	MOU	Memorandum of Understanding
CCC	Canadian Commercial Corporation	MRA	Mutual Recognition Agreement
CIBS	Canada's International Business Strategy	NAFTA	North American Free Trade Agreement
CIDA	Canadian International Development Agency	NATO	North Atlantic Treaty Organization
CSA	Canadian Space Agency	NEBS	New Exporters to Border States
DFAIT	Department of Foreign Affairs and International Trade	NEXOS	New Exporters Overseas
DND	Department of National Defence	NRC	National Research Council
EBRB	European Bank for Reconstruction and Development	NRCan	Natural Resources Canada
EC	Environment Canada	NST	National Sector Team
EDC	Export Development Corporation	OAS	Organization of American States
EDI	Electronic Data Interchange	OBS	Open Bidding Service
EU	European Union	OECD	Organization for Economic Co-operation and Development
FDI	Foreign Direct Investment	PEMD	Program for Export Market Development
FIPA	Foreign Investment Protection Agreement	R&D	research and development
FITT	Forum for International Trade Training	S&T	science and technology
FTA	Canada-U.S. Free Trade Agreement	SAGIT	Sectoral Advisory Group on International Trade
FTAA	Free Trade Agreement of the Americas	SIC	Standard Industrial Classification
GATT	General Agreement on Tariffs and Trade	SMEs	small and medium-sized enterprises
GDP	gross domestic product	TC	Transport Canada
GNP	gross national product	WTO	World Trade Organization
HRDC	Human Resources Development Canada		
IBOC	International Business Opportunities Centre		
IC	Industry Canada		
IFI	international financial institution		

ABORIGINAL PRODUCTS, SERVICES AND TECHNOLOGIES

Canada has over 20 000 active Aboriginal-owned companies, which fall into many of the categories commonly used to segment industries. Aboriginal exporters sell products covering over 30 Standard Industrial Classification (SIC) codes. They are owned either by Aboriginal communities or by individual Aboriginal people, living on or off reserve. (Aboriginal people include Indian, Métis and Inuit people.) While many of these businesses are relatively small, a considerable number are large enough to enter the export market.

A little over 100 companies have been identified as currently active exporters or export-ready. In addition, there are about 200 Aboriginal tourism sites that are ready to receive international tourists.

The export-oriented companies can be divided into two broad categories:

- those whose products have a Canadian Aboriginal cultural element to them (e.g. arts and crafts, music, food, fashion, tourism, and environmental and resource-industry consulting); and
- those whose products could as well be produced by any other Canadian company, regardless of ownership (e.g. computer software, engines or peat moss).

Main Challenges

In general, Aboriginal companies engaged in international business development face two types of challenges: those that are common to small business in general, and those that are particular to Aboriginal-owned businesses.

The challenges that are common to virtually all small businesses include the need to ensure the viability during the first five to eight years; to access appropriate debt and investment capital; to develop better management skills; to develop effective business strategies for particular markets; and to use new technologies and information strategically.

Further, Aboriginal firms face the following challenges that arise because they are Aboriginal-owned:

- lack of an equity base caused by low levels of income;
- legal restrictions that prevent First Nations from using reserve lands and residences as collateral for loans;
- limited access to financial institutions;
- lack of a track record in business and the "thin" skill base resulting from the newness of many enterprises;
- the need to transfer knowledge and experience effectively from leading-edge exporters to those new or potential exporters;
- considerable distance from markets, suppliers and institutions that provide market, financial, accounting and other support;
- a less-developed infrastructure resulting in part from the small size of communities and a lack of income; and
- a lack of recognition as an identifiable product grouping.

In addition, there is a second dimension to the challenges listed above, which relates to the specific types of products and services that Aboriginal companies offer.

Traditional Products: Aboriginal firms producing arts and crafts and other "traditional" products face unique challenges. These include:

- identifying and developing small international niche markets for traditional products and services;
- being a small company trying to build up and service many small and geographically dispersed markets; and
- building up a distribution network for small new exporters of traditional products, which demands both product samples and a background on the cultural significance of these products.

Non-traditional Products: Different challenges face those Aboriginal firms that sell non-traditional products such as engines, peat moss, curling brooms, etc. These include:

- gaining a sufficient track record, a critical mass of sales, financial acumen, management expertise and credibility to enter the export support system;
- overcoming the lack of awareness of the contribution that Aboriginal businesses can make to the Team Canada export initiative; and
- surmounting obstacles created by distances from major markets.

Strategic Direction

The government's key goal is to help current and potential Aboriginal exporters to compete effectively in international markets, both as an integral part of the broader Team Canada effort, and as a specific sector that is increasingly making a unique contribution to the overall trade initiative. To achieve this goal, a comprehensive strategy has been developed to promote the development and competitiveness of Aboriginal-owned businesses in domestic and international markets. This forms the core of Aboriginal Business Canada's *Aboriginal Trade and Market Expansion Initiative*, which is being implemented in conjunction with Aboriginal firms, federal departments, provinces and territorial governments. The National Sector Team (NST) is expected to review and further refine the strategy. The overall strategy is composed of a general component as well as two sector-specific components: Traditional Aboriginal Products and Services, and Major Market Products and Services.

General Component:

The general elements of the strategy are as follows:

- continue to identify existing and prospective exporters;
- ensure that exporters are aware of opportunities, and encourage them to take advantage of these leads;

- bridge gaps in areas such as specific company weaknesses, requirements for business and marketing plans, financing needs, consulting needs, export advice and referrals;
- respond to the need to increase communications within government to reach clients more effectively;
- create increased awareness in the private and public sectors of Aboriginal-export capabilities;
- network firms with each other and with those in other trade networks;
- stream clients into existing trade services offered by the federal, provincial and territorial governments, and private-sector organizations; and
- in partnership with Aboriginal producers, examine the feasibility of developing an "Indigenous trade mark" to facilitate international recognition.

Sector-specific Components:

Traditional Aboriginal Products and Services:

Traditional Aboriginal Products and Services: The goal of the strategy for this area is to realize the export potential of the entire range of traditional Aboriginal products and services — those where the label "Aboriginal" serves to give the product or service a unique appeal to a specific market or group of markets.

Three specific areas, which warrant individual treatment, have been identified within this overall category:

- *Culturally Based Products, including Aboriginal Tourism;*
- *North of 60; and*
- *Indigenous-to-Indigenous Consulting and Technology Transfer.*

Private-sector/government teams, which will take their direction from the NST, are being set up to focus on trade support for each group. Each team will have a mandate to:

- build international awareness of traditional Canadian Aboriginal products and services in the three specific markets (United States, Germany and Japan);

- increase direct exposure of Canadian producers in these markets;
- address the training needs of exporters;
- improve the distribution infrastructures needed to sell into these markets; and
- provide support on a case-by-case basis for companies targeting other markets.

Culturally Based Products: To take advantage of the unrealized potential in this area, a subsector team will be formed to support exports from Aboriginal industries. It will liaise with the Cultural Industries Sector Team, the Consumer Products Sector Team and the Canadian Tourism Commission (CTC). This subsector team, composed of industry and government, will concentrate on companies in the areas of arts, crafts, food, fashion, music and tourism, and will:

- determine gaps in sector needs, especially those in marketing and distribution, and export training;
- champion specific marketing and distribution-related activities, including increasing participation of Aboriginal artists and artisans on international trade missions, and at trade fairs and gift shows;
- ensure that individual companies are informed of the lessons learned by other Aboriginal companies in the field; and
- carry out research, promotion and trade-development activities related to tourism.

Tourism in Canada nets \$27 billion a year and is a fast-growing sector. Aboriginal tourism accounts for about \$270 million. Many of the Aboriginal tourism sites are located on reserves and offer rich cultural experiences to visiting tourists. Aboriginal tourism has significant growth potential with an estimated capability to create another 2000 businesses and 30 000 new jobs. The main challenges faced by those involved in Aboriginal tourism are the deficiencies in packaged tours, marketing skills, knowledge of the tourism industry, and tourism training.

Aboriginal Business Canada, in collaboration with the CTC and the Department of Indian Affairs and Northern Development, is undertaking activities to enhance the contribution that Aboriginal tourism makes to the Canadian economy. A national inventory of Aboriginal tourism products will be completed to provide more comprehensive information to both tourists and tour operators. In addition, an Aboriginal tourism travel guide will be published and distributed worldwide. Other strategic directions are to enhance the supply capacity through Aboriginal tourism training workshops in product packaging and marketing; and to develop, through major airlines, brochures for large European and Canadian travel agents. In 1997-98, Aboriginal Business Canada will fund costs related to planning, capital and market support of Aboriginal tourism firms.

North of 60: A North of 60 team is being contemplated, which would focus on exports from the geographic area north of 60 degrees latitude. This team will address trade development in Inuit arts, tourism, transfer of technology in circumpolar regions, communications and air transport, mining and resource-based industries, and Aboriginal-based food products and fisheries technology. The team will:

- review Aboriginal trade in the sectors identified;
- identify the major problems encountered by Aboriginal companies and determine their need to access international opportunities;
- champion and promote Aboriginal exporters, in part by co-ordinating with other departments and agencies;
- provide co-financing and joint management for trade initiatives;
- develop strategies and plans to promote Aboriginal exports from the region and work toward formulating and implementing a business strategy;
- support the development of trade initiatives; and
- ensure continuous, dynamic communications among the team members.

In addition, the creation in the summer of 1996 of the Arctic Council offers opportunities to enhance circumpolar trade. Under the Arctic Sustainable Development Initiative, eight Arctic countries will address the challenge to expand environmentally responsible economic activity in the Arctic.

Indigenous-to-Indigenous Consulting and Technology Transfer: Canada has expertise and a competitive advantage in this area. Also, development banks and agencies are interested in supporting specific initiatives. As a result, a subsector team is to be set up to focus on trade development and will:

- review inter-Indigenous business and development projects supported by the sector team;
- identify the major problems encountered by Aboriginal companies and determine their needs to access international opportunities;
- identify opportunities and provide co-financing and joint management for international business initiatives by Aboriginal companies; and
- develop strategies and plans to promote inter-Indigenous business links, including improved communications and information for missions.

Major Market Products and Services: Products and services that fall under this heading are those whose production bears no necessary relation to the heritage of the company's owners.

To support Canadian Aboriginal firms in pursuing new markets, the government will focus on helping firms to overcome barriers and enable them to be integrated into the broader export community.

The strategy is to:

- provide services to the exporting community as a whole, so that companies can take advantage of current information and can learn the lessons of other exporters;
- work directly with exporters to ensure access to government export services. For example, a trade "focal point" located in the Aboriginal Business Canada offices across Canada will help stream clients into existing trade development services offered;
- complement these services and "bridge the gap," where necessary, to enable clients to take advantage of market opportunities;
- provide business-planning support;
- provide financial support for marketing initiatives, missions and trade shows abroad, and special activities that promote Aboriginal trade opportunities;
- help clients take advantage of the full range of information, intelligence, databases and networking support offered through the Canada Business Services Centres and International Trade Centres;
- ensure that firms are registered in federal export-promotion databases; and
- participate in special sectoral and advocacy initiatives sponsored by Aboriginal Business Canada.

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ADVANCED MANUFACTURING TECHNOLOGIES

Advanced manufacturing technologies (AMT) are key to creating significant advances in discrete product manufacturing and in resources, primary and other processing applications. They enable firms to more rapidly produce higher-quality, less-costly products with enhanced features. Plants can become more agile, flexible and efficient. Products and systems incorporating AMT are used to enhance design, scheduling, production, storage and distribution activities. AMT are embodied in machine tools; computer-controlled machinery; machine vision systems; robotics; automated production and processing systems; process sensors; and instrumentation and control systems. AMT in the form of industrial software are closely associated with product and process design and control.

Canadian providers of AMT include hardware suppliers who develop technologies and supply products, systems integrators or applications specialists who develop and engineer systems using available components, and software developers of design and control systems. In this report, "AMT suppliers" will include all AMT providers. AMT applications are usually developed in close collaboration with users, providing them with technology solutions to their growth and competitiveness challenges.

Main Challenges

Sector Identity

The AMT sector is neither easily nor well identified. Its economic role and significance are not obviously displayed. Constituent companies are not easily identified, and Canadian AMT strengths not generally well-known or broadcast. As an increasingly important activity, the capabilities of Canadian AMT suppliers must be understood, reinforced and promoted, both to meet the challenges posed by competing initiatives in other countries and to exploit Canadian strengths in world markets.

Market Intelligence

The AMT sector consists primarily of many small firms that are highly dependent on technology and extremely export-oriented. Generally, they lack resources required for extensive market intelligence or for easily taking advantage of foreign business opportunities. To become new exporters or to expand in existing and new markets, they need to connect to specific potential partners and clients. In developing trade opportunities, the search is for customer problems that are amenable to leading-edge technology solutions. Customers may reside in any sector, and possible solutions can often be defined only through on-site consultations. Because Canadian suppliers represent very diverse capabilities, it is difficult to guide foreign representatives abroad toward specific new recipient sectors that would be compatible with Canadian strengths. Considerable exposure to AMT activities is required to identify the most worthwhile opportunities to pursue.

Domestic Competitiveness

Although it is increasingly important for Canadian manufacturers to be competitive with their U.S. counterparts, the domestic market has been slow to adopt AMT. A contributing factor may be a view held by some that North America is a single market with no significant country or regional differences. Trade in AMT can help to promote domestic competitiveness by identifying and exploiting those opportunities abroad that are applicable to major Canadian markets, such as forestry and wood processing.

Market Relevance

For most Canadian AMT firms, the United States is a very important export market with regions of major interest. Canadian companies need to monitor changes, and maintain and enhance their access to this market and to U.S. technology. The significance of other countries is highly dependent upon the technology and applications, which tend to be company specific. Familiarity with the interests of specific companies is the key to assessing their market development stage, identifying potential opportunities and

judging their importance to Canadian AMT firms. Structures such as the European Union Fourth Framework should be exploited to connect Canadian firms more strongly to relevant markets.

Financing

Difficulties in accessing sources of capital, including equity and bank financing for research and development (R&D) and for expansion, are ongoing, important challenges. In some cases, R&D tax credits are seen to be positive factors in ensuring that R&D continues in Canada.

Customer Support

Support and maintenance often represent a challenge for AMT suppliers when customers demand local service support, which smaller firms may find difficult to provide. Many suppliers are moving to remote diagnostics through computer linkages. Some customers, however, such as auto assemblers, need support to all of their production sites around the world.

Procedure Requirements

Many companies experience hindrances arising from export-import procedures, particularly delays with service personnel crossing the U.S. border.

Strategic Direction

Strategic Objective: To achieve a level of \$4 billion of Canadian AMT shipments to existing and developing Canadian and foreign markets by the year 2000.

Overall Approach: For those new and existing markets identified by the Canadian AMT supplier industry as most relevant to its strengths, improve mechanisms for connecting Canadian capabilities with potential partners and customers, and improve the ease of entry into foreign markets and the conduct of foreign trade for Canadian companies. The following strategies have been formulated to help achieve the objective.

Strategies

- Promote the identity of the Canadian AMT industry by distinguishing its characteristics and strengths in terms of know-how, technology and economics, by becoming familiar with and categorizing member companies, and by collating and summarizing AMT industry statistics.

- Identify and focus on priority AMT markets abroad and select those for exploitation in relation to Canadian AMT strengths. In particular, find ways to enhance the awareness and understanding of Canada's missions abroad about AMT, and to encourage Canadian companies to take advantage of their capabilities.
- Forge linkages between Canadian companies and their markets, by refining intelligence about AMT markets abroad, identifying specific foreign companies and their early requirements related to Canadian technology strengths, and enhancing mechanisms and information avenues for promoting Canadian companies abroad, especially SMEs.
- Broaden the scope of the search abroad to include opportunities related to important domestic industry sectors that will help to develop Canadian AMT capabilities for subsequent application in those sectors.
- Explore strategic alliances, joint ventures, investment mechanisms and trade structures to help Canadian AMT suppliers participate in foreign markets and clarify and reduce hindrances to trade activities experienced by Canadian AMT suppliers.
- Foster personnel exchanges and collaborative AMT research projects between Canadian AMT companies and foreign companies, universities and technology institutes.
- Establish closer links with relevant technology centres and identify technology sourcing opportunities in important AMT customer markets.

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ADVANCED MATERIALS

Advanced materials (AM) constitute a spectrum of new materials and processes that enable the design and manufacturing of products with novel and improved properties. The materials can either be used in structural applications, as in the construction and automotive sectors, or in functional applications, as in the exploitation of electronic and superconductive properties. AM include metals, ceramics, polymers and composites of these. These materials have high added value, are at the early stage of the product life-cycle and are enabling for many industries. Advanced processes related to the production and transformation of materials are also included in the sector.

Main Challenges

The development of trade opportunities in AM is achieved through unique partnerships, an intimate knowledge of client needs, and an ability to find creative solutions to improve productivity and product performance. In this context, the key challenges for industry are to:

- access critical market intelligence. (Who are the potential clients, and what are the requirements and partnership opportunities?);
- prospect technology, and facilitate technology transfer (e.g. create strategic alliances) of unique AM, and related applications and processes;
- increase networking opportunities, particularly among Canadian SMEs, foreign industry and AM organizations that have an overall goal to foster trade activities, technology access and investment opportunities; and
- consult on the formulation and adoption of international materials standards to achieve compatible standards with major trade partners.

The materials industry is composed of several broad categories, which have different specific international orientations and challenges. For example, a challenge for the ceramic industry is to open new relations with countries like the Russian Federation and Poland, which offer unique technologies that can translate into new partnership opportunities. For the polymer-composite industry, the challenge is not only to continue to promote trade relations and to access technology within the G-7 (Group of Seven leading industrialized countries), but also to gather market intelligence and to explore growing opportunities in Asia and Latin America more systematically.

Investment prospecting, while not a direct challenge to the industry, is an important area for international activities. For example, new investments in advanced polymer and fibre technologies, which Canada does not yet possess, directly translate into increased trade opportunities and potentially a more competitive AM-user industry. The challenge within the context of this strategy is to leverage the networking capital created from the international business activities into new potential investment for Canada.

The clients of the AM industry come from a multisectoral background — aeronautics, automotive, sporting goods, marine and construction, to name only a few. International venues of client sectors are potentially attractive to develop new trade opportunities. The challenge for industry is to pilot activities toward venues that might offer real opportunities to enter new markets.

Finally, ongoing dialogue between industry, government and institutional stakeholders will continue to provide the basis for identifying trade opportunities and articulating industry requirements.

Strategic Direction

- Showcase the capabilities and aspiration for partnerships of Canadian AM firms that are ready for international business through a multimedia CD-ROM, which is made available at international events to the government network of trade representatives, the government trade-sourcing unit and stakeholders in foreign countries. Also include in the CD-ROM a directory on Canadian sources of expertise in AM from universities, government and private laboratories. In 1996, the pilot release of the CD-ROM and other electronic information on the above led to a substantial number of contacts and trade leads between foreign and Canadian organizations (Industry Canada [IC], Department of Foreign Affairs and International Trade [DFAIT]);
- Increase the number of Canadian SMEs that are exposed to trade and technology opportunities in the United States and Europe by facilitating their participation at key trade shows, arranging visits with AM institutes and holding firm-to-firm meetings about specific areas of interest. The target is to invite 150 key firms to participate at various international AM trade activities (IC, DFAIT);
- Increase the information flow on markets and technology-transfer opportunities in Asia (Japan, Korea and Taiwan), Latin America (Brazil, Chile and Argentina) and Mexico. Hold fact-finding missions on market opportunities for composite materials in Asia with the co-operation of industry networks such as the network for Advanced Composite Materials in Bridges and Structures, and the Canadian Advanced Composite Structural Materials Association (IC, DFAIT);
- Broaden access to previously untapped sources of research in Central and Eastern Europe. Encourage networking with research institutes and firms by visiting and reporting on activities of several materials-related institutes, universities and industries in Poland and the countries of the former Soviet Union. Obtain Canadian industry feedback and interest for follow-up missions (IC, DFAIT);
- Work with Investment Partnership Canada to identify and nurture new Canadian AM investment in companies with unique capabilities. Open a dialogue with targeted companies as a pilot activity (IC, DFAIT);
- Further Canadian interests in the development of international standards for ceramics (ISO/TC206), and of codes and standards in bridges and structures, through the Advanced Composites Materials in Bridges and Structures (ACMBS) network, by supporting the creation of multi-stakeholder committees (IC); and
- Improve the dissemination of the international information on markets, technology and investments, which is coming from the missions and the event reports through the Strategis Internet site, the Canadian industry associations and networks such as The Canadian Plastics Industry Association (CPIA), the Composite Materials Centre (CMC), ACMBS and the Canadian Ceramics Society (CCS) (IC, DFAIT);

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AEROSPACE AND DEFENCE

The aerospace and defence (A&D) sector embraces a wide range of associated manufacturing and service subsectors. It consists of firms that develop, produce and maintain commercial and military aerospace products, and defence-related products and services for marine- and land-based applications. It includes manufacturers of aircraft; helicopters; aero-engines; simulators; electronics; major systems and components; aviation-security products as well as naval vessels; military vehicles; and equipment. It also includes services such as repair and overhaul (R&O), training and aerial firefighting.

Main Challenges

- **International Trade and Business Environment:** Market access is a major issue for Canadian firms, since trade and production are heavily influenced by non-tariff barriers (NTBs) such as set-asides and industrial offset policies, particularly in the military aircraft market.
- Many of Canada's foreign competitors are effective in leveraging the international commitments of their governments in areas of defence or international development.
- **Structural:** Relationships among companies are changing, as firms at every level of the supply chain demand that their subcontractors and system suppliers shoulder more development costs and risks, or provide complete subsystems.
- Customers are placing a greater emphasis on "full-service" packages that include training and after-sales support.
- Product development is increasingly focussed on reducing the design and production times, as well as operating costs, associated with A&D products.
- Business-to-business relationships are increasing in complexity. They require considerable sophistication in terms of the application of electronic data interchange (EDI), innovative financing techniques and technical expertise.

- With the exception of the very largest primes (Bombardier, Pratt & Whitney Canada and Bell Helicopter), most Canadian firms are small by international standards and often lack the financial and technical resources to compete successfully in this type of environment. Few of them can offer the comprehensive capabilities now required by customers, and few have the breadth to bid on major offshore systems without partnering. Yet the level of inter-firm co-operation in Canada lags behind that in competitor countries.
- **International Marketing:** Canadian firms face additional challenges in marketing internationally, given their relatively small size.
- The penetration of foreign markets can be extremely costly.
- It may be difficult to obtain timely and appropriate information and intelligence on foreign markets.
- The need for insights into foreign cultural and business practices may require high-quality foreign representation in the form of agents, alliance partners or key contacts.
- Canadian firms may find it difficult to arrange for export financing that can compete with the terms offered by foreign organizations.
- **Defence-specific:** As a result of the link to national security and the control of advanced technologies, partnering between governments and the defence sector is often mandatory.
- More attention is being paid to price and competitiveness in defence procurement: technical performance and top quality alone are no longer enough.
- There is an increased emphasis on low-cost solutions and the need to reduce the life-cycle costs of military systems.
- Declining defence budgets will lead to stronger protectionist pressures.

- The industry supports the Canadian defence exports-permits policy that reflects this country's policy on international human rights. However, changing interpretations of Canada's export-control regulations make it difficult for our A&D industry to plan ahead or to commit to certain major international tenders.

Strategic Direction

1997-2000: A Vision for Canada's Aerospace and Defence Industry

The A&D International Business Strategy aims to increase the Canadian industry's share of world markets by:

- pursuing selected international markets offering profitable opportunities that correspond to Canadian service and product strength;

- increasing the market share of firms already exporting in this sector; and
- increasing the number of firms exporting in this sector by promoting Canadian world-class capabilities in specialized or new market niches.

To achieve these aims, industry and government have articulated a framework of six elements, which form the basis of a three-year strategy. This strategic framework and the market-segmentation approach that was developed will help the National Sector Team (NST) and the missions to better focus and leverage their efforts to achieve maximum results.

Table 1 provides an overview of the thrusts and priorities for 1997-2000.

Table 1: Overview of the Strategic Framework for Aerospace and Defence 1997-2000

Level	Strategic Framework	Priority Actions
International Trade Environment – where government involvement is a requirement	1. Policy, legislation and market access	<ul style="list-style-type: none"> • gather intelligence on NTBs and participate in international negotiations • Monitor procurement practices • Reinforce DDSA/DPSA • TC/FAA standards • Customs clearances
Objective: To achieve a more favourable international business climate for Canadian A&D firms	2. Endorsement, leverage and advocacy	<ul style="list-style-type: none"> • Strengthen monitoring of bid requirements; support of Canadian bidders' rights • Represent industry with respect to "right to bid" • Endorse Canadian products used by Canadian government • Leverage Canadian participation in international initiatives
Structural – where industry and government work together to enhance export capabilities of firms	3. Enhance Canadian SME export capability: <ul style="list-style-type: none"> – export preparation – access to resources 	<ul style="list-style-type: none"> • Increase use of existing training and information sites and How to Outreach Seminars (both civil and defence) on market awareness • Promote existing domestic financing sources • Target incoming and outgoing missions • Target participation in air shows • Target and work with SMEs to develop international market potential
Objective: To achieve greater SME participation in world markets	4. Teaming/business networks	<ul style="list-style-type: none"> • Promote flexible networks concept; train brokers, conduct seminars • Form networks and alliances within Canada and with foreign firms • Promote supplier-to-supplier relationships as means of reaching foreign and domestic exporting primes
International marketing – where government and industry work in partnership to enhance export initiatives abroad	5. Market intelligence/information	<ul style="list-style-type: none"> • Identify intelligence needs and ensure timely and targeted dissemination • Strategic involvement of CFAs • Develop strategies on geographic (or subsector) basis • Work with industry to develop better market intelligence on major programs
Objective: To achieve greater impact in target countries	6. Flagship presence	<ul style="list-style-type: none"> • Strategic participation/visibility in events/countries • Team Canada Aerospace and Defence activities air shows including Airshow Canada, Participation in APEC

Strategic Priorities for 1997-98

Work will proceed over a three-year period on all six strategic thrusts. During 1997-98, particular emphasis will be placed on the following priorities:

Program-driven Opportunities

- **Market Intelligence:** Exploiting opportunities in program-driven markets depends on a comprehensive and current knowledge base of major emerging programs. Government and industry will co-operate to establish a mechanism and process to identify the scale and scope of emerging programs. This information will be used to match Canadian capabilities with specific opportunities and to develop an appropriate positioning strategy.
- **Teaming and Partnering:** Taking the lead from identified program opportunities, efforts will be made to establish opportunity-driven alliances and teams that will enhance Canada's ability to respond to the increasing demand for complete subsystems. This effort will be augmented by the development of flexible networks, increased preparation of small and medium-sized enterprises (SMEs), and enhanced linkages/mentoring between key companies and suppliers.

Purchase-driven Opportunities

- **Market Access:** Enhance market access through greater global acceptance of Transport Canada airworthiness standards. Bridging the gap between customer perceptions and reality will form the initial element of a longer-term effort to use Transport Canada's high standards for safety and security as a competitive discriminator in world markets.
- **Enhanced SME Support:** Improve R&O turn-around times. Efforts will focus on mechanisms to reduce customs-clearance paperwork and delays, to minimize the impact of policy changes, and to develop greater company capabilities in the area of EDI.
- **Teaming and Partnering:** Establish opportunity-driven alliances and teams to meet customer demands for service providers with a "full capability" set.

Geographic Market-driven Opportunities

- **Market Access:** Identify, in a timely manner, aviation infrastructure projects that match Canadian capabilities. This will be accompanied by the development of an appropriate and ongoing mechanism for acquiring and disseminating timely information and intelligence on emerging projects around the world.

- **Teaming and Partnering:** Establish opportunity-driven alliances and teams to identify possible linkages within the sector and with other sectors such as consulting engineering and construction.

All Opportunities

- **Enhanced SME Support:** Link customer needs with the capabilities of Canadian aerospace SMEs. As yet, there is no current, comprehensive and convenient knowledge base of these capabilities, which could be an effective sourcing tool for buyers, partners, etc. The focus for 1997-98 will be to build on existing databases as a first step in expanding capabilities and establishing new alliances and teams.
- **Flagship Presence:** Create a strong Canadian government presence in AirShow Canada 1997 by:
 - co-ordinating a Canadian government presence;
 - actively supporting the industry's strategic planning; and
 - assisting in the recruitment of buyers from around the world in accordance to Canadian exhibitors' capabilities (DFAIT/missions and ASCI).
- **Flagship Presence:** Support SubCon 1997 through incoming buyers.

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AGRICULTURAL TECHNOLOGY AND EQUIPMENT

This sector comprises manufacturers of tractors, implements and equipment designed for soil preparation, seeding, crop protection, harvesting, handling and storing, and primary processing of a wide range of agricultural crops.

Main Challenges

The main challenge is to expand Canada's position as a global leader in the development, production and marketing of tractors, hay and forage equipment and large-scale dry-land farming equipment.

Another challenge is to overcome non-tariff barriers, particularly with respect to the homologation of regulations in the European Union (EU) and the availability of globally competitive financial packages for exporting to developing markets.

Strategic Direction

The overall goal of the international strategy is to increase exports of farm machinery by 15 percent by 1999. To achieve this goal, government, with industry, will:

- work with the Coalition of Farm Machinery Associations in Canada to develop a matrix of all major product groups, listing individual Canadian manufacturers, and relate these groups to specific world markets for farm machinery (Department of Foreign Affairs and International Trade [DFAIT], Industry Canada [IC], associations);
- work through the National Sector Team for Agricultural Technology and Equipment (which includes the Coalition, IC, DFAIT, the provinces and companies) to develop a marketing approach for specific product groupings in foreign markets, addressing such issues as market access, tariffs, non-tariff barriers, financing and trade promotion (DFAIT, IC, provinces, associations);
- continue to pursue the United States as Canada's main market, particularly for companies new to international trade (DFAIT, IC);
- maintain the market development program for Canadian dry-land farming technology in Australia (DFAIT, IC, western provinces);
- continue market development for specialized cereal grain equipment in South America and South Africa (DFAIT, IC, associations);
- focus market development support to the entire northeast corridor of China on large-scale grain harvesting, storage and processing equipment (western provinces, western industry);
- encourage medium-sized to large Canadian companies that are experienced exporters to target the Commonwealth of Independent States (CIS) (especially Ukraine, Kazakhstan and Russia) and Central and Eastern Europe as prime development markets for Canadian dry-land farming technology (DFAIT, IC, industry);
- take advantage of the market opportunities for farm machinery in Mexico created by the North American Free Trade Agreement (NAFTA) through joint-venture marketing and manufacturing initiatives (DFAIT, IC);
- develop strategic alliances for investment and technology exchange and diffusion to exploit the opportunities presented by the changing market regime of the EU. Specific activities will focus on co-operation in productivity improvement and technology exchanges (IC, Sector Technology Centres);
- promote Canadian agricultural mechanization technology to foreign buyers at agricultural equipment trade shows (IC, International Trade Centres [ITCs], provinces);

- help associations and companies to overcome financing and marketing problems in new markets, particularly in developing countries (ITCs); and
- encourage manufacturers of special-crop equipment (such as potato equipment manufacturers in New Brunswick and Prince Edward Island, tobacco equipment manufacturers in Ontario, and orchard equipment manufacturers in British Columbia and Ontario) to increase marketing initiatives (individual visits, trade fairs and missions) to targeted regions and countries with sales growth potential (ITCs).

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AGRICULTURE, FOOD AND BEVERAGES

The agri-food industry is an important component not only of the economy of Canada but also of the economies of all the provinces. It accounts for 8 percent of Canada's gross national product (GNP) and employs close to 2 million people (1995). For every \$1 billion of value-added exports, 15,000 new Canadian jobs are maintained or created.

Table 2: Overview of the Agriculture, Food and Beverages Sector in

Canada, 1994-95	(\$ billions)
Farm inputs	10.5*
Primary agriculture	23.8
Food processing	42.0
Beverage processing	6.7
Food retailing	54.0
Food service	27.6
Agri-food exports	17.5
Agri-food imports	12.7

* - 1993 data

Source: *Agriculture and Agri-Food Canada (1996)*

Strategic Direction

The goal of Canada's agri-food strategy is to increase the value of Canada's exports of agri-food products to \$20 billion by the year 2000. This goal will be achieved by combining the strong determination of the industry with appropriate support from governments. Ultimately, Canada's goal is to recapture a 3.5-percent share of world trade in agri-food products, a share that was held in the early 1960s.

Good progress has been made toward reaching this goal. Exports of agricultural and food products increased to \$17.5 billion in 1995 from \$13.3 billion in 1993, when the goal was set.

The strategy to achieve the \$20-billion goal recognizes the need for Canada to become more competitive in the increasingly globalized world

economy. It calls for a more sharply focussed, streamlined effort, co-ordinated among federal and provincial governments, in support of industry's export drive, and in support of initiatives to attract international investment and technology.

The emphasis is on value-added products, the most rapidly growing sector in terms of international trade. Efforts will be targeted at high-potential markets, where significant, measurable results can be achieved. Governments will work together in developing detailed, three- to five-year action plans for those priority markets.

The strategy is underpinned by the vision of a world-competitive, market-oriented Canadian agri-food industry by the year 2000. There are enormous opportunities to capitalize on Canada's food production potential and excellent image abroad to increase exports and attract investment. In responding to these opportunities, government, in consultation with industry, will focus efforts in six key areas:

1. Helping Canadian companies become export ready by ensuring access to adequate training, information, skills and support.
2. Enhancing trade performance through appropriate use of and participation in trade shows, missions and promotions.
3. Disseminating market information and intelligence with an expanded array of information products, focussed on client needs and delivered as needed.
4. Streamlining delivery of government programs and services through improved co-ordination and co-operation among governments and industry in international business-development activities.
5. Improving market access by managing and monitoring existing trade agreements as well as by pursuing new access and resolution of current trade issues.
6. Attracting international business investment by an expanded effort to inform potential investors of the strengths of the Canadian agri-food industry.

Total global agri-food exports were close to US\$400 billion in 1993. Between 1972 and 1992 the average yearly growth rate was 8 percent. Canada's share of this trade was just over 3 percent.

Tremendous export opportunities exist for the Canadian agri-food sector. Value-added products, such as processed meats, baked goods and canned and frozen fruits and vegetables, constitute the largest, fastest-growing and most profitable part of the world's agri-food trade. If the Canadian industry is to reach the goal of \$20 billion in exports by the year 2000, it will be through a major shift in its product mix. A substantial increase in exports of value-added, consumer-ready products is needed to complement the exports of bulk commodities.

The United States continues to be Canada's most important market. Other major markets are in Asia, the European Union and Mexico.

Table 3 shows a breakdown of the Canadian agri-food industry's main foreign markets.

Table 3: Trends in Canadian Agri-food Trade

Country	Canadian Exports (\$ millions, average 1993-95)	Canadian Market Share* (%)
Japan	1 736.5	5.3
China	814.2	6.0
South Korea	381.2	3.0
Taiwan	111.6	2.0
Mexico	321.2	7.0
Brazil	251.2	3.5
European Union	1 407.1	2.0
United States	8 018.7	20.0
Other markets	2 343.2	n.a.
TOTAL	\$15 384.9	3.1%

* year of estimate varies by market.

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ARTS AND CULTURAL INDUSTRIES

The arts and cultural industries consist of the visual and performing arts; publishing; music; film and television production; and the emerging multimedia industry. Also included is a section on broadcasting and cable.

Main Challenges

- Since Canada's cultural imports still exceed its exports by a ratio of two to one, it is important to ensure that its cultural industries have access to a reasonable share of the domestic market by maintaining existing support measures (and even introducing new ones, where required).
- It is necessary to consolidate Canada's presence in the traditional markets of the United States and Western Europe, and establish a presence in the emerging markets of the Asia-Pacific region, Latin America and Central Europe.
- An emerging market for multimedia content is posing its own challenges and opportunities, both domestically and internationally. Here again, the main challenges will be to ensure that Canadian producers have access to the new distribution systems both domestically and internationally, and that limited access to financing for multimedia content does not prevent Canadian voices from having a significant presence on the information highway.
- Statistics on the arts and cultural industries (especially on their exports, foreign revenues and market share in key foreign territories relative to other competition) should be improved to evaluate the success of existing and new initiatives more efficiently.
- It is important to ensure that Canada's extensive network of missions abroad works effectively for the industries through knowledgeable, trained personnel who are equipped with an understanding of and access to information about Canada's cultural industries; are able to promote Canadian cultural goods and services; can gather market intelligence for Canadian companies; and can help them to make contacts with their counterparts abroad.

Strategic Direction

The government, in co-operation with the industries, will:

- continue to pursue an effective cultural advocacy campaign in the United States, Europe and at home to ensure that Canada's policies for cultural industries are understood and supported (Department of Foreign Affairs and International Trade [DFAIT], Department of Canadian Heritage [DCH]);
- ensure that participation in key international fairs, festivals and markets does not diminish but increases, wherever possible, since they offer an effective way to promote Canadian cultural products, gather market intelligence and establish contacts with foreign business partners (DFAIT, DCH);
- through development of appropriate training programs, ensure that Canada's foreign service officers and trade commissioners abroad are able to adequately promote Canadian arts and culture, and provide export assistance to Canadian companies (DFAIT, missions);
- consider extending export and financial assistance, and other support measures, to multimedia content to ensure that Canadian voices are not excluded from the information highway, and that the cultural industries can effectively compete in this important new market (DFAIT, DCH, Industry Canada [IC]);
- gather better statistics on this sector, especially with regard to foreign revenues and sales (DFAIT, DCH, IC, Statistics Canada).

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AUTOMOTIVE

The Canadian automotive manufacturing sector consists of two major industries: motor vehicle assembly and components production.

The sector produces a wide range of products for both Original Equipment (OE) and Aftermarket (AM) manufacturers. As well as passenger cars and light trucks, products include engines and major drive train components, steering and suspension parts, wheels and brake parts, stampings, seats, interior and exterior trim, electrical components and tires.

Main Challenges

The challenge for government is to maintain an industrial and trade-policy environment that fosters the development of the motor vehicle, parts and equipment industry; to ensure that Canada remains attractive to investors for manufacturing, technology development and research and development (R&D); to increase sourcing opportunities; and to increase trade.

The challenge for industry is to remain competitive in the face of ever-increasing competition and consolidation, as well as the gradual reduction of international tariffs and other trade barriers. Continued emphasis on improving productivity, quality and pricing, will ensure that the industry can meet the challenges that face it.

To increase trade with key automotive countries, it continues to be necessary to raise the profile of the Canadian industry. Government must ensure that key trading partners and the new emerging markets are aware of Canadian capabilities. Industry, when presented with opportunities, must be encouraged to pursue them.

Discrepancies in trade data and other statistics are being harmonized to improve effectiveness of analyses, and to provide fair and full comparability on a North American basis. Efforts should continue on the harmonization of emission and safety standards with other jurisdictions.

Ongoing strategic analyses, and timely dissemination and distribution of relevant information and intelligence, by all stakeholders, will assist business development.

Strategic Direction

The overall action plan for the sector is focussed on the following strategic elements.

Industry-Government Co-operation

The Automotive Advisory Committee (AAC) will undertake activities and analyses in collaboration with appropriate stakeholders on:

- continued streamlining and harmonization of trade data and other sector statistics on a North American basis with North American Free Trade Agreement (NAFTA) partners: ongoing (AAC/International Committee, Department of Foreign Affairs and International Trade [DFAIT], Industry Canada [IC], Automotive Parts Manufacturers' Association [APMA], Automotive Industries Association [AIA], Association of International Automobile Manufacturers of Canada [AIAMC], Japan Automobile Manufacturers' Association [JAMA]); and

- harmonization of emission and safety standards in North America: ongoing (AAC/Standards and Regulations Committee, Transport Canada [TC], IC, Environment Canada [EC]).

To improve automotive sector knowledge in Canada's trade missions abroad, a work plan will be prepared and implemented to increase dissemination and distribution of strategic auto-related intelligence and information to Canadian trade commissioners: ongoing (AAC/International Committee, DFAIT, IC, APMA, AIA, Ontario, Quebec).

The profile of the capabilities of the Canadian auto parts sector in developed and emerging markets will be raised through media promotion, preparation of "evergreen" sector-specific reports, a strong industry lead in international activities; incoming media missions from Japan and Europe; and outgoing missions where appropriate (DFAIT, IC, APMA, AIA, Ontario, Quebec).

To ensure that both OE and AM Canadian companies have full market access to all sourcing, trade and investment opportunities, regular bilateral and multilateral consultations will be undertaken with key players in Japan, Europe,

the United States, South America and Southeast Asia. Information will be exchanged and issues discussed, as they arise, and a work plan will be implemented: ongoing (DFAIT, IC, missions).

Original Equipment Manufacturers

Sourcing/Trade Development

Analyses and surveys will be undertaken of parts/materials sourcing patterns by new entrant assemblers and market intelligence from missions. Strategic visits will be made to assemblers to assess potential for supply and export of vehicles and OE/AM parts. Auto parts missions will be arranged as appropriate (DFAIT, IC, APMA, AIA, missions).

Improved contacts between Canadian suppliers and Japanese assemblers in North America will be promoted through corporate visits and technical seminars in key locations to increase OE parts sourcing in Canada from \$1.4 billion to \$3 billion over the next two years (DFAIT, IC, Pacific Automotive Co-operation Inc. [PAC], APMA, missions).

Promotion will be undertaken in key markets to raise the profile of the Canadian sector and to demonstrate OE parts supply capability (sourcing and exports) through seminars and fair participation in Japan, Germany and the United States, and through industry participation in an international business conference in Japan (DFAIT, IC, APMA, Ontario, Quebec, missions).

Assessment visits will continue in emerging markets, particularly China and Brazil, to analyse the full scope of sourcing and investment opportunities, and to obtain more detail on trade, distributor networks and trade associations.

Investment/Technology Acquisition

There will be analyses and visits to assemblers in Canadian-based plants to promote the assignment of key product mandates in plants here; to continue assembly expansion investments, as markets dictate; and to discuss their ability to assist the OE parts sector for design-in capability: ongoing (IC, Ontario, Quebec, missions).

Tier One parts manufacturing (systems integration) will be promoted in areas, where Canada needs more depth, as will new/complementary investments such as auto electronics and drive train parts. The focus will be to promote business partnering, joint ventures, licensing and alliances, particularly in Japan, Germany, France and Austria, using incoming partnering missions and targeted visit programs to Canadian-based and offshore companies (DFAIT, IC, PAC, missions).

To promote technology inflow, analytical documents will be prepared, technical/diagnostic workshops will be held to improve manufacturing, and responsive government technology policies and programs will be highlighted: ongoing (IC, PAC, Ontario, Quebec, missions).

To increase foreign investments, an examination and comparison of competitiveness of the Canadian investment climate versus that in other jurisdictions will continue, and investment promotion presentations will be maintained. Information seminars in Canada, with speakers invited from the relevant territories, will be considered (DFAIT, IC, APMA, AIA, Ontario, Quebec).

Research and Development

Using the media and bilateral technology development programs, R&D in Canada will be increased by promoting a greater awareness of both the Canadian R&D tax benefits, and the availability of national and provincial labs (IC, DFAIT, Ontario, Quebec).

Aftermarket and Services Industries

Sourcing/Trade Development

Opportunities for Canadian AM suppliers will be increased through participation in international automotive trade shows in the United States, Mexico and Europe, and through identified distribution networks, catalogue shows, and incoming buyers' missions from Japan, the emerging markets and elsewhere. New emphasis will be given to new opportunities in North American jurisdictions, where emission and safety-standards laws are in place or planned, and to the promotion of Canadian expertise in warehousing, distribution systems and inventory management (DFAIT, IC, AIA, missions).

Producing documents, holding seminars and organizing market-assessment visits in Latin America, India and the Pacific Rim, there will result in the collection, analysis and dissemination of sector information on new opportunities (DFAIT, IC, AIA, missions).

Seminars will be held and information/intelligence will be disseminated from missions to develop the capabilities of new exporters and enable them to better respond to new opportunities (DFAIT, IC, AIA).

International alliances will be fostered at the trade-association level.

Canadian companies will be encouraged to participate in "non-traditional" trade shows in Prague, Warsaw and Dubai.

Emphasis on incoming buyers' missions will be increased.

Development and publication of sectoral country market profiles will be continued.

Investment/Technology Acquisition

Global awareness of Canadian supply capabilities will be increased, and AM investments in complementary product lines from the United States and Europe will be promoted, through participation in trade fairs (see sourcing), promotion of joint ventures and licensing, and the publication of an AM exporters' directory (DFAIT, IC, AIA).

New process and product technology (particularly in Europe), and competitive packaging developments will be monitored: ongoing (DFAIT, AIA, missions).

To improve Canadian competitiveness and capability in the AM sector, an industry group will study packaging, and Intelligent Manufacturing Systems Canada will examine processing manufacturing: ongoing (AIA, Packaging Association of Canada).

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BIO-INDUSTRIES

Biotechnology, broadly defined, is the application of living organisms or their components to make or modify products, to improve plants or animals, or to develop micro-organisms or higher life forms for specific uses. This definition encompasses both the new biological tools of genetic engineering, cell fusion, and protein engineering, as well as traditional techniques of fermentation used in wine and beer production and classical breeding for selecting improved plants and livestock. A more narrow definition ("new" biotechnology) refers only to the use of more advanced applications based on recombinant DNA, monoclonal antibody and other modern bioprocessing techniques arising from applications of molecular cell biology.

In reality, biotechnology is not so much an industry but a broad enabling technology with applications across a wide range of industries such as health care, agriculture and agri-food, aquaculture, environment, forestry and mining. Since standard industrial classification codes do not exist for biotechnology products and because biotechnology is often broadly defined, consistent statistical data on sales, exports and employment are not generally available.

Main Challenges

Company Size

The majority of Canadian biotechnology companies are very small firms with niche products or services. Typically, they have limited resources to gather market intelligence and promote their products and services abroad.

International Partnerships

Because intellectual property protection, legal matters and business culture differ throughout the world, firms need information on the business and legal framework in each country to avoid potential pitfalls and breach of contract lawsuits. Of particular importance is product liability information in the United States and knowledge of intellectual property protection and how to do business in the Far East, where business culture is radically different from that of North America.

Regulations

The regulatory environment is a major factor affecting international competitiveness because of its impact on product costs, market access and investment decisions. Currently, there is no mutual acceptance of regulatory approvals, and the regulatory situation, particularly for agri-food products in Europe, is in flux. Canadian firms need a clear description of regulatory requirements in major markets, a list of appropriate contacts, and the tracking of progress toward harmonization. Knowledge of ISO certification, labelling and packaging requirements is also important.

Non-tariff barriers

Several firms cited difficulties in getting their goods across the border due to the U.S. Food and Drug Administration (FDA), U.S. customs, and U.S. Department of Agriculture inspections. Similar delays were encountered on importing products into Canada. As of December 1995, the FDA required foreign manufacturers of medical devices (including in-vitro diagnostics) to have an agent residing in the U.S. list and register their products, which puts Canadian firms at a competitive disadvantage with U.S. domestic suppliers who list with the FDA directly.

Investment

Over the last five years, the total private-sector investment into Canadian biotechnology companies has exceeded \$1 billion. Nevertheless, financing remains a challenge for early-stage companies. More established firms have also indicated that it is important to keep the U.S. investment community aware of Canadian developments. While alliances with multinational pharmaceutical firms may address to a large extent the needs of biotechnology companies in the health-care therapeutic and diagnostic fields, other sources of capital are still needed for companies in the agri-food, aquaculture, resource and environmental sectors.

Promoting Canadian Capabilities

Efforts to promote Canadian bio-industries abroad have focussed mostly on helping firms find alliance partners in the United States and Western Europe. Awareness is low of Canadian capabilities in other important markets (e.g. the Asia-Pacific region and Latin America). A related issue is the need to increase trade officials' awareness of the strengths of Canadian biotechnology, which will enable them to better identify market opportunities on behalf of Canadian companies.

Strategic Direction

International Marketing

- continue to focus on the United States, followed by the European Union (EU), as the major markets and source of foreign investment for most Canadian biotech companies;
- foster strategic alliances and provide market intelligence for biopharmaceutical companies, and promote Canadian biopharmaceutical capability to the investment community;
- promote Good Manufacturing Process (GMP) contract production of biotherapeutics in Canada for clinical-trial applications;
- promote the ability of U.S. diagnostic companies to have their products manufactured in Canada for offshore markets while waiting for FDA approval;
- foster alliances with small and medium-sized U.S.-based environmental engineering consulting firms that do not have in-house biological expertise and that are interested in partnering with Canadian bioremediation companies;
- promote exports of immunodiagnostics in the EU;
- provide information on opportunities in emerging markets in the Asia-Pacific region and Latin America for selected niche applications: Korea, China, Taiwan, and Malaysia (agri-food, veterinary vaccines, animal husbandry); Ecuador, Chile (aquaculture); and Mexico, Argentina, Brazil, Cuba, and Central America (veterinary vaccines, animal husbandry); and

- carefully screen and select promotional activities in Japan, given the difficulty that SMEs have in penetrating this market. Major opportunities are in aquaculture (exports) and therapeutics (exports; technology transfer).

Regulatory

- provide information on the particular regulatory requirements and points of contact for each country in the EU for diagnostics and agri-food biotechnology products;
- provide information on U.S. FDA regulations in the area of biologics and biopharmaceuticals; and
- work with authorities in the EU and Japan for acceptance of agri-food products derived from biotechnology.

Investment

- promote Canadian biotechnology as an investment success story;
- introduce early-stage companies to international alliance partners and sources of capital, focussing on the United States and Western Europe;
- develop a database on the agri-food biotechnology cluster to facilitate collaboration and investment opportunities; and
- promote foreign investment in Canada.

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BUILDING PRODUCTS

In a rapidly changing global environment, the international competitiveness of Canadian industry is a key to economic growth and job creation. An emerging global focus on construction and housing is creating an unprecedented opportunity for Canada to emerge as a dominant exporter of construction and building products. The construction and building products industry is a major component of the Canadian economy, and is of crucial importance to all regions of the country. While many segments of the industry have traditionally been focussed largely on the domestic market, exports are becoming an increasingly important source of growth opportunities.

Main Challenges

Company Size

The majority of Canadian firms in this industry are very small, produce similar standard products and operate in localized domestic markets. In many cases, the foreign competitor is a much larger company with more comprehensive product lines and greater promotional resources. Small Canadian firms are at a disadvantage because they have limited resources to gather market intelligence and experience in promoting their products abroad.

Market Access

The domestic standards regulatory environment is a major factor affecting the international competitiveness of construction and building products and systems. Standards have tended to be non-tariff barriers to trade in building products between countries. Despite a number of recent successes in removing such barriers to foreign markets, they remain a significant impediment to expanded trade in construction and building products.

Strategic Direction

Industry Canada (IC) and the Department of Foreign Affairs and International Trade (DFAIT) have developed a National Sector Team (NST) for building products. Public-sector members of the NST include representatives from several federal

departments, trade missions abroad and provincial governments. Private-sector NST partners include industry associations such as the Manufactured Housing Association of Canada (MHAC), the Canadian Manufactured Housing Institute (CMHI), the Canadian Window and Door Manufacturers' Association (CWDMA), and the Canadian Kitchen Cabinet Association (CKCA) as well as individual companies. A number of other organizations such as the B.C. Wood Specialties Group, the Council of Forest Industries (COFI) and Bureau de Promotion des Industries de Bois (BPIB) have also focussed significant resources on priority international market development. In all, the team has over 100 contacts in its network.

The NST is the primary instrument for planning and launching initiatives addressing international building product business development. Team members work in collaboration in an effort to devise co-ordinated, industry-led strategies and activities for trade development. The following are areas in which the government intends to work through the NST to address some of the challenges identified above relating to international business development in the upcoming fiscal year.

Helping Small Companies Compete Internationally

There are a number of examples where small firms have overcome the impediment of size by working co-operatively or in consolidator networks, which combine their resources to market complementary products in a more comprehensive manner. Canadian manufactured housing, window, door and kitchen-cabinet companies are already beginning to work together in this manner. To help expand international market opportunities for Canadian small and medium-sized enterprises (SMEs) in the industry, IC, in conjunction with specific associations, will continue to develop marketing tools such as the International Directory for Canadian Manufactured Buildings and a new directory for the window, door, kitchen-cabinet and millwork industries.

Over the next several years, the NST will focus on working with industry associations and clusters of SMEs to promote co-operative efforts in identifying and penetrating priority target markets. The sector has the potential to contribute significantly to the government's target of increasing by 3500 the number of firms that are successfully exporting by the year 2000.

In order to meet this target, generic marketing tools must be developed that can be used by government — particularly trade commissioners — and the private sector, to effectively promote business development abroad. A number of print and electronic marketing materials have been developed to showcase Canadian capabilities in the building products sector, and to profile the international business development interests of companies. Government and industry will work together in co-operation with the NST to determine how best to integrate and use limited resources to provide the most cost-effective international promotion of the industry.

Consultations to date with individual companies, associations, provincial representatives and trade missions have resulted in a consensus that the strategy set out in the previous year's International Business Strategy should be continued, with some modifications.

Geographic Priorities

The large number of international construction and building products events that occur each year require that government, in partnership with industry, target promotional efforts on events that have the greatest impact with limited resources.

The following represents a consensus of the NST on geographic priorities:

The United States: The United States will remain the leading export market for Canadian construction and building products for the foreseeable future. Many new-to-exporting firms gain their first export experience in this marketplace. Also, many Canadian firms import components, chemicals and semi-finished materials used in their manufacturing processes from the United States, then re-export value-added products back to that country. It is also worth noting that many of the largest construction and building products manufacturing firms operating in Canada are U.S.-owned, and cross-border trade in construction and building products is well-established.

In this industry, Canadian exports to the United States have traditionally been heavily weighted to border states. However, the bulk of construction activity in the United States is taking place in the south and southwest. While the share of Canadian exports shipped to these regions has increased over the past few years, Canadian exports are still weighted disproportionately to the northeastern and midwestern states. While distance and transportation costs can make it more difficult for Canadian manufacturers to compete in the southern states, there is potential to significantly increase building product exports to these regions.

Strategy: The NST believes that a highly focussed level of promotional activity and investment prospecting in the United States should be maintained. In collaboration with Canadian consulates, regionalized strategies for niche market expansion and diversification should be pursued. Priority will be placed on maintaining and expanding market share in this, the world's largest market for building products.

Japan: With 1.6 million housing starts and total construction expenditures estimated at over \$450 billion in 1996, Japan is the world's second-largest market for building products. Several segments of the Canadian building products industry have enjoyed very rapid growth in exports to Japan, and significant growth potential remains to be developed for a host of construction and building products.

Enhanced access to the building products market in Japan remains a key priority. The Mutual Recognition Initiative (MRI) on building products standards, signed by the Minister of Industry in October 1994, is a major long-term activity with significant potential to enhance access for Canadian firms wishing to enter the Japanese market. This market-access work will continue with Japanese authorities to increase the number of recognized Canadian foreign-testing organizations for building product testing.

Strategy: Japan is importing ever higher volumes of value-added construction and building products, primarily because of their cost advantage. As a result, efforts to gain further market access for building products and services should be maintained.

The European Union (EU): Although Canadian building products have enjoyed their greatest acceptance in the United States and Japan, Europe remains an important export market. However, a weak construction market, regulatory barriers and increased competition in the market have all combined to limit growth opportunities in Europe for many segments of the Canadian construction and building products industry. Despite these difficulties, market opportunities do exist for some individual construction and building products in the European market.

Strategy: The NST believes that the present level of trade-development activity should be maintained in Europe, with emphasis placed on self-funded missions and trade show participation. (See also *Canada's International Business Strategy* chapter on Forest Products.)

Other Markets

In addition to markets in the United States, the EU and Japan, Canadian building products manufacturers export to dozens of other countries around the world. Many markets in Asia, Latin America and Eastern Europe offer exciting opportunities for individual companies or industries, as well as significant growth potential over the medium to longer term. However, viewed from the perspective of the construction and building products sector as a whole, these markets represent a small fraction of total exports and are perhaps best characterized as niche markets.

Asia-Pacific (excluding Japan): Rapid economic growth in this region is fuelling increased levels of investment in both residential and non-residential construction. Various industries within the Canadian construction and building products sector have been successful in exploiting market niches in markets like Hong Kong, Singapore and Taiwan. In China, increasing investment in commercial projects and infrastructure, combined with a program intended to improve the country's housing stock, may create significant opportunities for Canada over time.

Latin America: With rapid growth in construction activity in countries like Argentina, Mexico, Chile and Colombia, niche market opportunities exist for Canadian building products manufacturers. However, the sharp devaluation of the Mexican peso in late 1994 triggered an economic slowdown that dampened demand for imports across the region.

Eastern Europe: Some segments of the Canadian construction and building products sector are exporting successfully to Central and Eastern Europe, particularly Poland and Russia. The introduction and acceptance of wood-frame construction in some of these markets has enabled the export of additional wood and non-wood building products.

Strategy: Although they offer tremendous potential, many emerging markets are price-sensitive; financing in many cases is lacking; mortgage market systems are either not in place or inadequate; and builders are often unfamiliar with wood-frame housing. The NST believes that for emerging markets such as Eastern Europe, China, India, Latin America and South Africa, emphasis should be focussed on exchanging technological and building code know-how, mortgage-financing systems, technical publications and promotional materials. For more advanced markets, emphasis should be placed on self-funded missions and participation in trade shows.

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BUSINESS, PROFESSIONAL AND EDUCATIONAL SERVICES

Business, professional and educational services encompass a wide range of sectors, including: accounting; consulting engineering; management consulting; scientific services; architecture; construction; geomatics; legal services; design; personnel services; education and training; security services; financial services; computer services; communications services; transportation and logistics; trading houses; distribution (retail and wholesale); and health-care services. These services are typically sold to businesses, rather than to final consumers.¹

Main Challenges

Canadian services firms face a number of challenges in expanding their foreign presence and export sales, including:

- developing and improving marketing skills better suited for foreign markets;
- developing cost-effective methods of obtaining and delivering information and intelligence on foreign markets;
- developing effective methods to raise the profile and credibility of Canadian firms in foreign markets;
- developing more strategic marketing plans;
- developing more effective methods of forming partnerships and joint ventures to pursue international business;
- better exploiting international financial institutions (IFI)-funded development projects, given their greater emphasis on education and training services and social development; and
- balancing the expansion of their international business against the need to maintain their domestic business base.

Given the prominence of small and medium-sized enterprises (SMEs) in the business and professional service industries, there is also a need to:

- further develop the export capability of the sector's diverse SMEs; and
- identify SMEs capable of exporting, and improve the management skills of firms that are not yet ready to venture abroad.

Strategic Direction

The following measures will be implemented to increase the export performance of Canadian services firms.

International Business Readiness

- improving the export skills of services exporters through workshops, "how-to" guides and structured training courses (Department of Foreign Affairs and International Trade [DFAIT], Industry Canada [IC], Forum for International Trade Training [FITT], industry associations); and
- developing information products (*Take a World View, Steps to Competitiveness, Stakeholders' Analysis*) to improve the export readiness of services firms (IC, DFAIT).

Partnering

- promoting the development and use of the Canadian Companies Capabilities database as a means of increasing the international competitiveness of Canadian firms (IC).
- encouraging business services firms in related advisory industries to participate in Industry Canada's Capital Projects Suppliers Capabilities Matrix (IC);
- promoting the use of the International Business Opportunities Centre (IBOC) to service firms and industry associations, as it attempts to match business leads from trade commissioners abroad with the business interests of Canadian firms (DFAIT, IC);

¹ Several service industries are discussed in greater detail in other strategies. Consulting engineering, architectural, residential and non-residential construction, urban planning and developer services are discussed in the Construction, Architectural and Engineering Services strategy; communications services, computer services and geomatics are outlined in the Information Technologies and Telecommunications strategy; environmental services are in the Environmental Industry strategy; and health-care services are in the Health Industries strategy.

- improving IBOC information on services firms and opportunities (DFAIT, IC);
- improving technology/marketing relationships between Canadian goods and services providers (IC);
- increasing partnering between Canadian and foreign firms in target markets (IC, DFAIT, missions);
- arranging meetings between business services firms and foreign governments and agencies to discuss business opportunities (IC, Canadian International Development Agency [CIDA]). A series of meetings between Canadian services firms and the government of Panama has already been conducted. Sectors of primary interest are energy; transportation; communications; tourism; informatics; geomatics; training; logistics; marine-related services; environmental services; and infrastructure. Missions to Panama are planned to ensure that Canadian industry is well-positioned to tap this market.

Networking

- relying on the Business, Professional and Educational Services National Sector Team (NST) to increase private-sector and government co-operation in trade development and promotion (NST);
- enhancing network opportunities by expanding the companies participating in the broader Services NST Network (NST);
- encouraging service industry firms to develop business networks under the Canadian Business Networks Coalition, which is administered by the Canadian Chamber of Commerce (IC, NST, industry associations);
- enhancing networking among firms in the same sector to improve industry cohesiveness and develop industry-based export strategies (IC, industry associations); and
- encouraging service industries to develop conferences, seminars and workshops that introduce potential customers to their services (i.e. trading houses and franchising) to increase industry awareness, expand business opportunities and promote exports (IC, industry associations).

Profile and Credibility

- designing and delivering new trade-development initiatives for services exporters to profile Canadian expertise and build credibility in foreign markets (use of local media, showcasing of capabilities through conference participation, and marketing and technical presentations) (DFAIT, geographic divisions, missions);
- completing Sector Competitiveness Frameworks on specific services industries (Geomatics, Commercial Education and Training, and Management Consulting) that will develop a consensus among industry players on competitiveness and export issues with possible actions by key groups (IC);
- providing follow-up training and resource support to DFAIT trade commissioners to expand their knowledge of Canadian services companies to help them provide expert assistance to services exporters (DFAIT, IC); and
- encouraging service industry associations to develop information products for trade commissioner training and to help trade commissioners to better represent the service industries in foreign markets (DFAIT, IC, industry associations).

Market Information

- engaging services industries associations and firms to:
 - determine export interests and market priorities of members (NST, DFAIT, IC);
 - define market-intelligence needs (NST, DFAIT, IC);
 - help members with their export efforts and provide required training (DFAIT); and
 - develop sector export strategies (NST, IC);
- developing mission and trade-fair strategies for specific service industries (DFAIT, IC);
- working with specific service-industry groups to develop a Team Trade Canada approach to international trade for their industry (IC, DFAIT);

- providing market information and networking facilities by electronic means such as the Internet, electronic bulletin boards, supplier databases, etc. (DFAIT, IC);
- providing access to Industry Canada's Strategis (<http://strategis.ic.gc.ca>) expertise and strategic information to help Canadian firms be more competitive, and provide hot links to Canadian and international business information databases; and
- developing industry statistics to provide timely measurement of export performance (Statistics Canada, DFAIT, IC, NST, Sectoral Advisory Group on International Trade [SAGIT], industry associations).

Financing

- providing improved access to financing for small services exporters (DFAIT, EDC [Export Development Corporation]); and
- identifying financing needs unique to service exporters and developing an action plan (NST).

International Projects

- increasing Canada's share of IFI-funded contracts by the year 2000, by:
 - educating companies on how to work with IFIs and how the changing priorities of IFIs are creating new opportunities for Canadian services firms (IC, DFAIT); and
 - electronically distributing IFI project information (IC);
- undertaking targeted missions in response to the priorities identified by NST working groups, particularly those that will encourage consortia development and promote downstream linkages among services firms and goods producers (DFAIT); and
- publishing quarterly lists of CIDA's bilateral projects in pipeline and operational projects.

Market Access

- focussing on improving market access in priority sectors for Canada in the World Trade Organization (WTO) (in particular, architects and consulting engineers) (DFAIT, industry associations, SAGIT); and
- documenting and pursuing cases in which access provided for in the WTO and the North American Free Trade Agreement (NAFTA) is denied in practice (DFAIT, IC, SAGIT, industry associations, individual companies).

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CHEMICALS

Chemicals can be divided into three broad categories – commodity, specialty and formulated chemicals. Commodity chemicals are traded globally and rely on the supply of competitively priced feedstock and manufacturing economics. Specialty chemicals, on the other hand, are higher value-added, requiring greater service and distribution support. Formulated products are blends of chemicals and additives for special applications and rely on performance improvements or creation of brand distinctions.

The chemical industry makes more than 70 000 products, which cover inorganic and organic chemicals; petrochemicals; resins; elastomers; fertilizers; pest management; fine and specialty chemicals; pharmaceuticals; paints; varnishes; soap; and cleaning compounds. These are made from a wide range of crude oil; natural gas; metals; minerals; vegetable oils; animal fats; and other raw materials.

Main Challenges

The main challenges facing the Canadian chemical industry are to:

- maintain Canada's position as the largest chemical and chemical-products exporter to the United States and increase chemical exports to other countries;
- substantially increase the Canadian formulated and specialty chemicals sector's share of the North American market, and increase exports to South American, Asian and European markets;
- obtain timely information on international business opportunities;
- attract new investments and product mandates to maintain global competitiveness and market shares;
- find, adopt and commercialize new product and process technologies to remain globally competitive;
- ensure that the industry works with federal and provincial governments to create a more effective and globally competitive regulatory environment;

- obtain market intelligence from the Department of Foreign Affairs and International Trade (DFAIT), on general and specific market data, including demand; the regulatory climate in identified countries; and product legislation, labelling and registration;
- use DFAIT's contacts to find agents or representatives, and to identify and check the credentials of potential partners for strategic alliances; and
- use DFAIT's business services to obtain information on custom brokerage and distribution systems.

Strategic Direction

Consistent with challenges facing the industry, the National Sector Team (NST) will:

- identify the response to market opportunities and focus resources on providing strategic information on targeted trade markets such as the United States, Argentina, Mexico, Brazil, Japan, China, South Korea, Hong Kong, Thailand and India (Industry Canada [IC], DFAIT);
- expand communications with small and medium-sized chemical companies to assist with exports (IC, DFAIT);
- secure country-related business-climate information and business-introduction services to the chemical industry using Canadian diplomatic missions (DFAIT);
- develop specific training seminars for initiating and expanding exports to U.S., South American, Asian and other markets (IC, DFAIT);
- provide advice and information tools for subsidiaries of multinational enterprises (MNEs) to develop business cases, and win global mandates and investments from their parent organizations (IC);
- identify countries and develop, in partnership with industry, appropriate incoming and outgoing technology missions to support technology transfer (IC, National Research Council [NRC]);

- promote awareness of the advantages of carrying out research and development (R&D) and commercial development in Canada through dissemination of information on the R&D tax credits to the chemical industry (IC, NRC, DFAIT);
- work toward developing a more competitive regulatory environment through harmonization and mutual recognition agreements with our major trading partners (IC, other government departments);
- continue to develop tools, in collaboration with Canadian regulatory departments, to address foreign-market regulatory issues such as Certificates of Free Sale (IC, Health Canada [HC]); and
- focus on the following regions, which have been identified as presenting good opportunities for the chemical sector: the United States; Asia (Japan, China, South Korea, Hong Kong, Singapore, Brunei, Malaysia, Thailand, Vietnam and India); South America (Argentina and Brazil); Mexico; the EU (Sweden, Spain and France); Eastern Europe; Africa (South Africa and Kenya); and the Middle East and Turkey (DFAIT).

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CONSTRUCTION, ARCHITECTURAL AND ENGINEERING SERVICES

The Construction, Architectural and Engineering Services (CAES) sector is made up of firms involved in the design, development, building and repair of infrastructure, housing, industrial plants and other facilities. It encompasses:

- Residential Construction
- Non-Residential Construction
- Consulting Engineering
- Architectural Services
- Urban Planning
- Developers

A particular feature of the sector is its capacity to combine specialized expertise in a multidisciplinary fashion to create capital projects. This characteristic allows the CAES sector to play an important role in leveraging export opportunities for several other sectors of the economy.

Main Challenges

Many firms are inhibited by the substantial up-front costs involved in international competitive bidding processes and in establishing a presence in foreign markets.

Companies pursuing international capital project opportunities find it difficult to access financing and investment capital and to assemble the necessary financial packages. Financing, bonding, performance guarantees, insurance and legal services are often unavailable in Canada and must be sourced abroad. CAES companies point out that financial guarantees more comparable with those offered by their competitors, and the ability to pool resources available only piecemeal in the Canadian marketplace, are necessary to enable more of them to engage in international work and to encourage joint ventures and other partnerships.

“Virtual companies” with the capabilities to handle specific projects are needed to take full advantage of opportunities arising from the trend toward total project contracting and privatization packages. Such integrated capability is available domestically “in pieces”; a single-team approach is required.

The successes of domestic capital projects need to be more aggressively promoted abroad. There is potential to build on Canadian success in the consulting and technical services sector by more effectively identifying downstream opportunities for Canadian manufacturers and for capital works and systems suppliers.

Small and medium-sized enterprises (SMEs), in particular, are often not aware of major projects being pursued by larger companies, and yet these projects offer opportunities for them to participate as partners and suppliers.

Relative to competitors, Canadian companies are often late in identifying and entering newly emerging markets. Many firms are not well informed about potential export opportunities, or about the services and programs available to improve their export readiness and to support their export marketing efforts.

Finally, market entry often remains impeded by local regulatory, technical and professional accreditation requirements, product standards requirements, and approval processes.

Strategic Direction

The following initiatives will be implemented to improve the export performance of the Construction, Architectural and Engineering Services sector as a whole.

In implementing the CAES sector strategy, particular attention will be given to co-operation and co-ordination among the federal and provincial governments and the various national, regional and provincial industry associations that represent the interests of the sector. There is also a recognized need to establish clearer targets for the international business development strategy and to ensure effective measurement of achievement.

Collective Project Opportunities

Maximizing the export potential of the CAES sector requires greater focus on using its collective strengths in integrated project delivery. Opportunities identified include:

- integrated urban development/new cities;
- airports;
- electric power projects;
- medical clinics/hospitals;
- resorts/hotels/integrated tourism facilities;
- educational institution complexes;
- transportation systems (rail, urban transit, highways, ports); and
- resource-processing plants and installations.

Financing

Future success requires paying greater attention to the capital project financing problems faced by the CAES sector and improving the linkages with financing sources in Canada and abroad. Particular priorities include:

- exploring the potential for Canadian financial institutions, including pension funds and insurance companies, to play a stronger role in providing the long-term financing, guarantees, bonding and insurance facilities relevant to the pursuit of international projects (Industry Canada [IC], Department of Finance, EDC [Export Development Corporation], associations, provinces);
- better focussing and co-ordinating the use of federal and provincial government programs and services in support of Canadian companies pursuing specific project opportunities abroad (IC, Department of Foreign Affairs and International Trade [DFAIT], Canadian International Development Agency [CIDA], EDC, Canadian Chamber of Commerce, Canada Mortgage and Housing Corporation [CMHC], provinces);

- improving the exchange of information on both domestic and foreign sources of financing (IC, DFAIT, EDC, provinces); and
- supporting domestic initiatives aimed at broadening expertise in project development and financing, particularly that required for build, own, operate, transfer (BOOT)-type projects (IC, DFAIT, EDC).

Supplier Development

Supplier development activities will build on existing federal, provincial and association initiatives and focus upon:

- improving the export readiness of CAES-sector SMEs, through industry association outreach programs, workshops, seminars, structured training courses, the preparation and dissemination of "how-to" guides, etc. (IC, DFAIT, CMHC, associations, provinces);
- supporting formal and informal interaction and networking — ideally built around an integrated project opportunity — among sector stakeholders (IC, DFAIT, associations);
- facilitating the partnering and consortia formation needed to pursue packaged projects such as design-build, turnkey and BOOT (IC, DFAIT, associations, provinces);
- encouraging firms, especially SMEs, to build business networks under the Canadian Business Networks Coalition (CBNC), which is administered by the Canadian Chamber of Commerce and aims to increase the international competitiveness of SMEs (IC, associations); and
- developing electronic infrastructure that can be used to share information on Canadian capabilities to supply capital projects and on existing and potential cross-industry and cross-border partnerships among service providers and downstream suppliers of equipment and materials (IC, DFAIT, provinces, associations).

Information and Intelligence

Initiatives will be pursued to facilitate the sharing of information and intelligence on international business development. This includes:

- devoting greater attention to identifying international project opportunities that match Canadian capabilities for integrated project delivery (IC, DFAIT, CIDA, provinces);
- deploying an electronic international financial institutions (IFI)/capital projects information and tracking system to facilitate private-sector access to timely and integrated information on capital project opportunities abroad and to improve communications among government officials across Canada and at Canadian missions abroad on project opportunities and interactions with Canadian companies (DFAIT, IC, provinces);
- organizing selective missions to identify, verify and build upon early project intelligence for clusters of high-priority construction and capital project opportunities (IC, DFAIT, CMHC, provinces, associations); and
- publishing quarterly lists of CIDA's operational projects and bilateral projects in the pipeline, which in turn will be linked to the electronic information infrastructure for international capital projects (IC, CIDA, DFAIT).

Export Promotion

Opportunities to promote capabilities in the CAES sector will be identified and supported through:

- targeted use of leading domestic events, such as "Construct Canada" (IC, DFAIT, associations, provinces);
- encouragement of the participation of more foreign buyers and business decision makers in domestic events where CAES are profiled (IC, DFAIT, provinces);
- incoming missions of foreign governmental and business delegations, focussed on showcasing Canadian infrastructure and capabilities in integrated project development (DFAIT, IC, provinces);

- preparation of promotional materials that underscore the breadth and depth of Canadian capabilities in infrastructure development (IC, DFAIT);
- organization of outgoing missions to selective priority markets (IC, DFAIT, CMHC, CIDA, provinces);
- facilitation of secondment arrangements to place Canadian CAES-sector specialists in key positions in the IFIs and the agencies of developing countries (DFAIT, IC, CIDA, associations); and
- encouragement of linkages with and technical assistance to foreign governmental and private-sector organizations involving issues of standards, codes and research and development relevant to the CAES sector (IC, CMHC, associations).

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CONSUMER PRODUCTS

Consumer products industries (excluding food and consumer electronics) encompass a wide range of sectors including apparel, textiles, footwear, sporting goods, recreational boats and equipment, giftware and crafts, business and institutional furniture, residential furniture, and tools, hardware and housewares.

Main Challenges

- Ensuring, through continued consultations, that government policies reflect the needs of consumer products industries. Increasingly, there is an awareness on the part of industries that they must buy into the drive to export if they are to survive.
- Industries need to make better use of marketing tools such as trade-name positioning, targeted distribution, after-sales service, pricing strategies and product quality.
- Export efforts and activities will have to be increased in growth and niche market segments to compensate for the industry's loss of domestic market share.
- Product-development costs and cycle times will have to be reduced to take advantage of growth opportunities and to become more responsive to market demands.
- Environmental and ecological concerns will have to be met in the major North American and European markets. The consumer products industries must develop products and strategies that accentuate the use of recycled and recyclable materials and products.
- Market intelligence on priority markets must be improved and upgraded. Canadian exporters require more relevant and detailed information on selected growth and newly developed markets. Market information should be more closely related to Canadian industry capabilities.
- The small size of many firms often means they do not have the resources, infrastructure or skills required to undertake major export activities.

- The high cost of financing exporting activities often prohibits small firms from committing to long-term export programs.
- As tariffs approach zero under the North American Free Trade Agreement (NAFTA), Canadian exporters will still face non-tariff barriers with respect to access to the U.S. market (i.e. the Buy American Act).
- Keeping abreast of the latest technologies in order to meet increasing customer demands has become extremely costly, especially for small and medium-sized enterprises (SMEs).
- Many firms lack adequate technical capabilities and must be more aggressive in adopting electronic data interchange (EDI) technology as a time- and cost-saving mechanism.
- Although Canadian manufacturers have been receiving increased worldwide recognition, Canadian consumer products (with a few exceptions) still do not enjoy the same level of brand-name recognition as do their European and U.S. counterparts.
- Consumer products industries will continue to face increasing import pressures from developing countries, and for certain sectors such as apparel, textiles, office furniture and giftware, import pressure will also come from developed countries, particularly from the United States as it increasingly targets Canada with its exports.

Strategic Direction

Education is one of the most important services that government can provide when encouraging Canadian companies to enter and expand into export markets. Government can draw attention to the need for niche marketing, the importance of product design and quality, and the difference that quality service can make in acquiring and keeping customers.

Government can play an instrumental role in identifying specific export market opportunities and in providing up-to-date foreign market intelligence on distribution channels, price points and retailers' requirements, particularly with respect to the U.S. market and new markets where trade opportunities may arise.

Where there is potential for both product and country diversification, the focus of proactive support efforts for the next five to 10 years should be on expanding export markets in the United States, Japan and Europe for sporting goods, recreational boats and household furniture, and in the United States for sectors such as textiles, apparel, business and residential furniture, footwear and giftware.

In carrying out its trade-advocacy role, government must maintain the pressure to gain increased access to foreign markets. Significant strides have been made in the last five years. There is also room to reduce input costs through further reductions in input tariffs. Streamlining the regulatory regime for consumer products will take on increased importance as tariff rates continue to come down. This includes signing mutual recognition agreements (MRAs), harmonizing rules and standards, and encouraging the adoption of ISO 9000 standards. Also, the government has a role to play in protecting successful exports against trade harassment. An opportunity to further improve access to the U.S. market under the NAFTA will present itself in 1997, when the rules of origin for textiles and apparel are reviewed.

Canada must undertake proactive foreign-investment promotion. Many offshore investors see Canada as a less-threatening country than the United States. As a party to the NAFTA, Canada could become an important destination for investment by companies seeking a springboard into the world's largest market for consumer products, particularly considering the NAFTA rules of origin, which encourage the use of raw materials from North American sources. With the expectation that the NAFTA may extend beyond the United States and Mexico (it may soon include Chile) to include a number of countries in Latin America and the Caribbean, a Canadian base of operations becomes even more desirable.

SMEs' successful ventures in key markets such as the United States, Japan, and Pacific-Rim countries should be actively publicized as a means to improve brand-name recognition in other foreign markets. For example, success in the United States can be effectively promoted in Japan, and success in the Japanese market can often ease access to other Asian markets.

The government will continue to help consumer products firms to organize their efforts toward exporting, and will inform the industry of market opportunities. Further, the government will provide guidance regarding the strategic elements of exporting and the establishment of better long-term strategies.

Companies must be encouraged to adopt state-of-the-art technologies related to quick response and EDI, to ensure compatibility with retailers. The use of information technologies as a marketing, communication and information-gathering tool should also be encouraged.

The government will help companies that are currently exporting to the United States to expand their marketing horizons, notably by taking advantage of new opportunities arising from the NAFTA, the Canada-Israel Free Trade Agreement and the Uruguay Round.

Industry-led programs and initiatives will be encouraged to help manufacturers, especially SMEs, to become more export-ready and better prepared to compete in international markets.

Global awareness of Canadian competitive strengths in production flexibility, product quality and quick response will be enhanced through various media and promotional publications, including product-specific capability guides.

National Sector Teams (NSTs) will continue to be used to actively encourage and support a more collaborative effort among federal and provincial governments, trade associations and industry stakeholders in the pursuit of international trade business strategies.

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ELECTRICAL POWER EQUIPMENT AND SERVICES

The Canadian electrical power equipment and services industry consists of companies that produce equipment and provide services for the generation, transmission and distribution of electricity. Subsectors produce a wide variety of products and services, including: equipment for hydro-, thermal- and nuclear-generating stations; power transmission and distribution equipment; electrical wire and cable products; power and distribution transformers; control and protection equipment; power-conversion equipment; alternate energy systems; and power-consulting engineering services. Broadly defined, the sector encompasses equipment manufacturers, utility companies, consulting engineering firms, and engineer, procure and construct (EPC) contractors.

Main Challenges

The following section outlines the main challenges faced by the Canadian electric power industry in penetrating export markets. These challenges can be broadly grouped into five categories, as follows:

Marketing

The Canadian power industry must increase its visibility in key markets by opening corporate offices and/or establishing long-term strategic alliances with local partners.

Canadian capabilities must become better known by the major international project-development companies; EPC contractors; financiers; and consulting engineering firms.

Similarly, the capabilities of Canadian small and medium-sized enterprises (SMEs), in particular, need to become better-known among consulting engineers and major-equipment packagers. SMEs face several additional challenges, most notably, a lack of export-financing know-how, a lack of capacity to track global project-information and a higher risk-versus-return equation.

Financing

In order to be successful in the growing market for greenfield private-power projects, Canadian suppliers need an increased ability to offer higher-risk, longer-term financing in sufficient quantity as part of their bid packages. This increase in export-financing capacity must come from both public (EDC [Export Development Corporation]) and private (banks, pension funds and investment funds) sources.

Notwithstanding Organization for Economic Co-operation and Development (OECD) restrictions on the use of concessional and tied-aid financing packages by governments to win foreign capital-project contracts, a few electric power projects continue to be "taken off the market" and awarded to Canada's competitors through their use of soft financing.

It is difficult for construction companies to meet the same Canadian-content criteria as equipment suppliers for EDC financing since the nature of the business requires the extensive use of local labour and materials. This is primarily a challenge with respect to hydropower projects, where as much as 80 percent of project costs are related to civil works.

Market Access

Some of the largest power markets in the world are also the most difficult to access. There are a range of barriers, which vary from country to country, including tariffs on imported equipment; registration protocols for foreign suppliers; political and jurisdictional complexities; unfamiliar local business practices; complex and poorly defined regulatory hurdles; unstable and underdeveloped financial and legal infrastructures; foreign-exchange risks; return-on-investment restrictions; taxation regimes; availability of project financing; preferences for domestic suppliers; and other barriers to entry.

Canadian subsidiaries must continue to win and maintain product mandates. Subsidiaries without world product mandates are often restricted to some extent by their parent companies from accessing certain markets.

Formation of Consortia

The Canadian power industry needs to develop the capability to form and lead consortia in bidding for international power projects.

There is a need for closer co-operation among Canadian international construction companies; equipment and service suppliers; major utilities; and consulting engineers, so that more integrated and comprehensive bids can be packaged.

Sustainable Development

The industry must deal with increasing environmental pressure, both at home and in the host country. For hydro-electric projects, concerns are centred around the ecological impact of flooding large areas of land. For nuclear projects, there are concerns regarding safety and waste disposal. For thermal projects, the concern is the reduction of emissions from combustion. The need for NO_x, SO₂ and greenhouse gas-emissions technology and control systems for thermal power plants has created a huge potential market for Canadian firms estimated to be worth \$5 billion to \$6 billion over the next five years, especially in Asia.

There is a lack of agreement internationally to recognize *Activities Implemented Jointly*, an environmental accord that would allow Canadian entities to obtain realistic credit for reduced emissions from overseas power and energy projects.

Strategic Direction

The following are areas for joint industry-government action, with key participants in parentheses:

- follow up Team Canada missions with short, focussed, single-minister visits to key markets to reinforce Canada's commitment to securing specific projects for Canadian industry (Department of Foreign Affairs and International Trade [DFAIT], Industry Canada [IC], Capital Projects Action Team [CPAT], National Sector Team [NST]);
- embark on a major marketing campaign to promote Canadian power-sector capabilities to major international private-power developers and key decision-makers in priority markets such as China and India (IC, DFAIT, EDC, NST);
- increase the availability of financing for international power-projects from Canadian financial institutions and other private-capital sources (IC, DFAIT, EDC, Canadian Commercial Corporation [CCC], NST, private-capital sources);
- establish a co-ordinated mechanism whereby early market-intelligence from the foreign missions, from Canadian International Development Agency (CIDA) activities in the power sector and from the international energy community is transmitted to Canadian industry via the NST (CIDA, DFAIT, IC, Energy Council of Canada [ECC], NST, provinces);
- continue to work toward bringing a co-ordinated and focussed approach to the use of scarce government resources and financing levers (CIDA, DFAIT, IC, EDC, CCC);

- educate SMEs on the basics of exporting and the resources available to assist them. Establish an ongoing mechanism whereby global power-project information is disseminated to SMEs via the NST, including projects for which prime contracts have already been let and also including those that may not necessarily be of interest to the larger Canadian players (DFAIT, IC, NST, industry associations);
- provide assistance to Canadian multinational subsidiaries to win and maintain world product-mandates from their parent companies (IC, DFAIT, industry associations);
- apply pressure at the political and diplomatic levels on those countries that continue to use various forms of soft financing to comply with OECD guidelines (IC, DFAIT);
- assume a stronger position at the OECD level to push for longer-term financing of private-power projects (EDC, DFAIT);
- review Canada's support of International Financial Institutions (IFIs) with a view to redirection to better support the Canadian power sector. The implementation of the IFI project-tracking system will provide for greater dissemination of IFI-funded opportunities, as well as a mechanism for monitoring the success of Canadian suppliers in such projects (IC, DFAIT);
- maintain and enhance the leadership that Canadian exporters continue to demonstrate in terms of highest standards for ethical international business conduct (DFAIT); and
- continue to support developing countries with the design and implementation of their energy and environmental regulatory infrastructures through such Canadian institutions as CIDA and the Atomic Energy Control Board (CIDA, AECB).

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ENVIRONMENTAL INDUSTRY

Canada's rapidly growing environmental industry provides a wide range of pollution prevention and environmental conservation, control, protection, remediation and enhancement technologies, processes, products and services. Because the use of fossil fuel energy figures strongly in environmental problems, alternative energy and energy efficiency are also considered to be key subsectors.

Canada's environmental industry is an enabling industry. Its success in developing efficient solutions for its domestic customers will be critical not only to its own long-term international competitiveness, but also to the competitiveness of many other Canadian industrial sectors.

Main Challenges

- effectively and efficiently focussing on pollution prevention and providing total solutions;
- better focussing government-wide resources for greater leverage in priority markets;
- building size, strength and competitiveness in the industry, particularly among small and medium-sized enterprises (SMEs), through joint ventures, alliances and partnerships among the Canadian firms themselves and also with financial institutions, developers of technology and the public sector both in Canada and abroad; and
- identifying and capitalizing on emerging opportunities in international markets that stem from large capital projects, local government initiatives and international agreements, by increasing private-sector understanding of build, operate, transfer (BOT) project financing, and by developing and co-ordinating Canadian industry resources for export markets.

Strategic Direction

The Canadian Environmental Industries Strategy, developed after extensive national consultations with industry and government stakeholders, contains a number of initiatives to address these challenges and enhance international business development in this sector. These initiatives include:

- **Environmental Market Intelligence**
Initiative: collect and disseminate to industry product and market information and industrial intelligence (Industry Canada [IC], Department of Foreign Affairs and International Trade [DFAIT]);
- **International Environmental Management**
Initiative: transfer Canadian public- and private-sector expertise and training relating to regulations, policies and technical programs to developing countries, with a view to the subsequent export of Canadian environmental systems, equipment, expertise and technologies (Environment Canada [EC], IC, Canadian International Development Agency [CIDA], DFAIT);
- **International Environmental Conventions and Agreements**
Initiative: identify and target specific projects and programs that arise from international agreements, with a focus on those supported by international financial institutions (IFIs) (CIDA, IC, EC); and
- **Strategic Alliances for Export Markets**
Initiative: support the establishment of consortia and alliances among SMEs with complementary strengths to form a competitive Team Canada package (IC, DFAIT, EC).

While lead organizations have been identified, ongoing consultations will identify other federal, provincial and industry stakeholders prepared to participate in the development, delivery and resourcing of these initiatives.

The following additional initiatives complement the strategic direction of the international business activities being undertaken by Canada's environmental industry.

- country-to-country co-operative arrangements, such as memorandums of understanding (MOUs), which help build relationships that improve trade and market access;
- the Inter-American Technology Co-operation Initiative, a two-year program consisting of six round tables in key industry sectors in various Latin American and Caribbean countries and focussing on environmentally sound technologies and practices;
- *Canadian Environmental Solutions* (CES), a multimedia tool for marketing solutions to both domestic and international environmental problems;
- Canadian Environmental Training Opportunities Program (CETOP), which promotes environmental training courses and work terms in Canada for experts and business people from other countries;
- Canadian Environmental Technology Advancement Centres (CETACs), which offer comprehensive technical and business services to help SMEs commercialize their environmental technologies and capture domestic and international markets; and
- Technology Partnerships Canada (TPC), an investment program designed as a partnership between business and government to encourage the development and commercialization of innovative environmental technologies.

While environmental industry stakeholders in Canada continue to be active in established markets in the United States, Western Europe and Asia Pacific, especially Japan and Australia, the priority emerging markets are in Latin America, Southeast Asia and Eastern Europe. Within these markets, efforts are targeted on Argentina, Chile, Venezuela, China, Malaysia, Vietnam, Poland and Romania. Mexico continues to be an important country for Canadian efforts because of the North American Free Trade Agreement (NAFTA).

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FISH AND SEAFOOD PRODUCTS

The Canadian fish and seafood industry comprises firms engaged in the processing and marketing of fish, shellfish, and marine plants and animals as well as by-products such as fish meal and fish oil. Firms process raw materials taken by Canadian harvesters, produced by Canadian aquaculture operations, or imported from foreign suppliers. From these materials a variety of value-added items are created, which are sold to Canadians or exported to global markets.

Main Challenges

Four principal challenges face this sector:

Over-regulation – The fish and seafood industry (including aquaculture) is highly regulated. While many of these regulations appear logical and beneficial (especially when viewed in isolation), their cumulative effect contributes to reducing the economic performance of the industry, which in turn reduces its international competitiveness. The application of regulations designed for the “capture sector” to aquaculture is particularly burdensome, as are provincial government restrictions regarding site licensing for aquaculture operations.

Areas of particular concern include the need for increased advocacy for aquaculture from the federal government, the need for completion of a thorough regulatory review, and the need for greater access to the aquatic resource (sites, fish for bloodstock and early trials).

Cost Recovery – The amount of cost-recovery initiatives to the Canadian seafood sector is estimated at \$60 million. Global price pressures from consumers and competitors prevent these costs from being passed along to the customer and must therefore be absorbed, thus eating into ever-thinner profit margins. If Canadian exporters cannot be profitable, they cannot be competitive.

Value-added Products – The development of new product lines is extremely expensive, often beyond the resources of the relatively small businesses in the fish and seafood sector. Investment opportunities to increase processing automation and aquaculture infrastructure in Norway, and the adapting of biotechnology processes in the United States, Norway and Denmark will require all stakeholders to enhance Canada's trade performance. Tax incentives that reward innovation and efficiency are required if Canada is to develop a value-added industry that can be globally competitive on a sustainable basis.

Raw Material – A solid, value-added industry requires a reliable source of raw materials; however, traditional Canadian groundfish remain in short supply. This sector will pursue strategic partnerships to secure raw materials for processing with China, the Russian Federation, the state of Alaska, Namibia and South Africa. Canadian missions must support business sourcing strategies.

Strategic Direction

The goal of Canada's fish and seafood trade strategy — increasing the value of Canada's exports to \$3.75 billion by the year 2000 — will be achieved through the increased competitiveness of the processing and exporting sectors and the realization of the potential of Canada's aquaculture industry. A strategic approach and co-ordinated effort by industry and all levels of government is required to make this goal a reality.

In response to these opportunities and challenges, the government has focussed efforts in the following three key areas:

Market Access

With the conclusion of the Uruguay Round, the focus will be on addressing and removing non-tariff barriers. Further, other market access issues include seeking lower tariffs through North American Free Trade Agreement (NAFTA) mechanisms, and by negotiating lower unbound rates.

As foreign non-tariff barriers are continually being established, government will work with industry to maintain and update the fish and seafood tariff and non-tariff inventory, while providing industry and sector advisory groups with regular status reports on efforts to resolve issues.

The government will also seek to improve the competitive position of Canadian fish and seafood exporters by defending Canadian export interests against unfair trading practices.

Canadian initiatives on inspection systems are expected to complete an agreement with South Africa; initiate negotiations for memorandums of understanding (MOUs) with Indonesia and Cuba; and consider Argentina, Chile and other Latin American countries for future agreements to improve trade linkages.

Market Development

Federal and provincial governments, agencies, industry and trade associations have worked together on the National Sector Team (NST) to develop a co-ordinated and strategic approach to market development in an effort to enhance trade performance, streamline delivery of government programs and services, and monitor progress in achieving targeted results. These strategies include:

- development of a strategic and comprehensive *Canada's International Business Strategy* (CIBS) with full participation by industry, the Trade Commissioner Service, and federal/provincial government departments and agencies;
- maintenance of firm capabilities and foreign-market interests on the WIN Exports database as the primary tool used by missions and the International Business Opportunities Centre in the Department of Foreign Affairs and International Trade (DFAIT) to match export leads with Canadian suppliers;
- distribution of a computerized directory of Canadian fish and seafood exporters to foreign food buyers;

- collaboration in focussing trade development activities in markets of high priority to industry (as in *Canada's Action Plan for Japan*);
- development of special export activities (including new approaches not supported through existing programs) in market niches as identified by industry;
- support for *Entrée Canada*, the new Canadian food and beverage publication for foreign food buyers, through the contribution of positive news stories and industry advertising;
- collaboration between industry and government in selecting the most appropriate fairs and missions for participation by Canadian firms, and improvement of networks between industry and government to maximize potential;
- review of the previous year's export programs and assessment of their contribution to exports; and
- support for the secondment of experienced seafood marketing personnel (from industry or federal/provincial government) to key missions.

Market Intelligence

The collection and dissemination of market-intelligence information is also a joint responsibility. This area has always been of significant importance to the fish and seafood sector because of its emphasis on export marketing. The increasing competitiveness of the global marketplace has made timely and accurate intelligence even more necessary for strategic decision making. The government is focussing efforts in the following areas:

- improving the quality of responses to client inquiries, trade leads, and market reviews and intelligence about the seafood industry outside Canada; and improving the timeliness of the information collected;
- broadening dissemination of timely fisheries market information through the DFAIT FaxLink, a fax-on-demand system, and its Internet World Wide Web (WWW) site;

- encouraging industry to assume greater responsibility for providing feedback and guidance to missions on gathering intelligence;
- enhancing identification and dissemination via FaxLink and web sites to Canadian firms on foreign harvesting, processing, post-processing and aquaculture technologies; and
- encouraging foreign companies to invest and make strategic alliances in Canada, thereby giving Canadian firms better access to international markets and improving their supply capabilities.

Specific Country Strategies

United States – Efforts will focus on resolving issues surrounding an unpredictable U.S. border inspection regime that has affected shipments of fresh fish and shellfish as well as in-bond live lobsters, which are in transit for markets other than the United States.

Continued efforts will be made to improve the visibility and image of Canadian fish and seafood products and of the companies producing them. In addition to participation at the International Boston Seafood Show and Sea Fare International, DFAIT and Agriculture and Agri-Food Canada are supporting a private-sector initiative to develop a new publication to promote Canadian food and beverage exports to foreign food buyers. Called *Entrée Canada*, this magazine will be circulated to more than 8000 buyers internationally, and is timed for distribution at important world food shows.

Asia-Pacific – In addition to resolving all market-access issues, the government should be encouraging investment from the Asia-Pacific region in the fish and seafood sector through strategic alliances and joint ventures. Taiwanese investors have been expressing interest in Canadian aquaculture. Opportunities for sourcing raw materials should also be pursued. In Korea, traders need to be educated about Canadian seafood suppliers and their capabilities to counterbalance the pervasive presence of Japan and the United States in that market. Incoming missions should focus on familiarizing Korean buyers with the Canadian industry, providing promotional materials and developing personal relationships.

Western Europe – Export market promotions will continue to focus on presenting the best-quality Canadian fish and seafood products to Europe, while the government continues to press for greater access for value-added products. Strategic-partnering opportunities for aquaculture technology will be pursued, as will sourcing possibilities where appropriate.

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FOREST INDUSTRIES

The Canadian forest industries sector operates in all regions of the country. It is composed of two major industry groups: paper and allied industries; and wood industries.

The paper and allied industries group is made up of two distinct segments: pulp and paper, which includes market pulp, newsprint, fine papers; and converted paper products such as coated papers, tissue products, speciality papers and packaging.

The wood industries group consists of three distinct segments: primary products; semi-finished products; and finished products.

The forest industries sector is a complex network of large and small, integrated and independent manufacturers.

Main Challenges

The goal of the Canadian forest industries sector is completely free and unfettered trade in all forest products. While working toward this key objective, there are a number of important challenges facing the industry, including:

- addressing issues of market access, including environmental concerns for both primary and value-added forest products;
- emphasizing the need for enhanced training and the preparation for export readiness, particularly in small and medium-sized enterprises (SMEs);
- building and managing an interface between trade and environmental policies. Trade flows have the potential to be affected by some multilateral environmental agreements, and uncertainties exist between these agreements and the existing dispute-mechanism systems;
- maximizing the use of available fibre by adding value through the manufacture of products that command premium prices;
- encouraging manufacturers, ranging from SMEs to large integrated companies, to produce a wide range of value-added, cut-to-size components to finished wood and paper products; and

- investigating new opportunities for value-added products in both priority and selected new emerging markets.

Environmental factors that have an impact on manufacturing processes, product design, raw material content and forest-management practices also have an important effect on the competitive position of the industry internationally. Factors include: effluent and emissions technology; land-use policies; forest-management practices; eco-taxes; eco-labelling; packaging requirements; and U.S. recycled-paper content.

The application of advanced technology is a prerequisite, if the industry is to continue to be globally competitive. The main challenge here is to increase investment in research and development (R&D) to:

- develop advanced processes and new products; and
- produce economically and socially acceptable solutions for environmental and sustainable development issues.

Strategic Direction

The future growth and economic health of the Canadian industry will depend, to a large degree, on maintaining existing access and capitalizing on emerging opportunities for additional trade in all markets. To achieve the overall objective of "free and unfettered trade in forest products," Canada will:

- continue to strengthen the forest products national sector team (NST), and the Sector Advisory Group for International Trade (SAGIT), composed of industry and government stakeholders, to ensure that initiatives are market-driven. The NST will evaluate the success of export market-development projects and activities (Industry Canada [IC], Department of Foreign Affairs and International Trade [DFAIT]);
- continue to actively negotiate for the worldwide elimination of all tariffs and non-tariff barriers facing Canadian forest exports (DFAIT);

- make use of the existing dispute-settlement mechanisms of the North American Free Trade Agreement (NAFTA) and the World Trade Organization (WTO), or bilaterally through other forums to settle various trade-related disputes. An example is the use of the NAFTA to settle the countervailing duty investigation of laminated-hardwood flooring companies, which was initiated by the U.S. government in 1996 (DFAIT);
- continue to pursue the deployment of industry-sector experts in key locations to further Canada's trade interests (DFAIT, IC);
- encourage Canadian industry to take advantage of deregulation of foreign building codes, existing testing-certification agreements, and mutual recognition agreements (MRAs) for product standards and certification procedures. Recent changes to Japanese requirements will benefit Canadian exporters (DFAIT, IC);
- encourage industry to develop and provide educational data to achieve full acceptance of Canadian forest products in priority markets (Human Resources Development Canada [HRDC], IC); and
- support the continuing trade-development and market-access work of the primary and manufactured wood manufacturers in the key export markets through co-ordinated federal/provincial/industry program activities (IC, DFAIT).

There is a significant need to both increase international recognition of Canada's capability and expertise in forest management and to ensure customers of Canada's commitment to supply forest products harvested from sustainably managed forests. The federal government will:

- co-ordinate provincial and industry efforts to actively promote Canadian forest-management practices, systems and expertise through the International Forestry Partnership Program (Natural Resources Canada [NRCan], DFAIT);
- support foreign-based industry association offices, Canadian embassies and officers abroad to heighten the awareness of the Canadian forest-industry environmental performance in forest management, raw-material utilization and product processing (DFAIT, NRCan, IC);
- promote the international acceptance of the Canadian standards for the certification of sustainable forest-management practices at appropriate international forums and by the missions (DFAIT, missions);
- support the development of national and international standards for an independent certification system for sustainable forest-management practices, and promote the acceptance of these standards by the International Organization for Standardization (NRCan, IC, DFAIT);
- develop MRAs with targeted countries such as Japan and the European Union (EU), which have been identified as priorities in terms of market access (IC, DFAIT); and
- use the WTO Trade and Environment Committee to further Canadian interests with respect to tariff and non-tariff barriers, including eco-labelling, and process and production methods (DFAIT, NRCan, IC, Environment Canada).

To keep abreast of scientific and technical developments, Canada must be well-informed and knowledgeable. To achieve these objectives, the federal government will:

- facilitate the international exchange of science and technology relating to the forest industry, with particular focus on the United States, the EU and Japan (IC, National Research Council [NRC], DFAIT);
- use existing expertise in Canadian embassies in the United States, the EU and Japan to increase the exchange of technology (DFAIT, IC); and
- organize outgoing and incoming technical missions, speaking tours and scientific exchanges to Europe, Asia-Pacific, Scandinavia and the United States (DFAIT, NRC, IC).

In recognition of the need to conserve shrinking financial resources, the federal government will improve co-ordination among the various industry associations and will:

- continue to strengthen co-ordination between industry associations and government programs through vehicles such as the NST, and will explore the potential of including other related industries (IC, DFAIT, provinces);
- emphasize the necessity of industry associations disseminating market intelligence and product information, and expanding export-readiness training (IC, DFAIT, HRDC); and
- encourage industry associations to develop and implement long-term export-marketing strategies and activities and strengthen their trade-development activities (IC, DFAIT, provinces).

Generic market-development activities have proven an effective and efficient means of expanding the exports of Canadian forest products. While these activities will be reduced as budgets are curtailed, the federal government will:

- co-ordinate and assess government funding for international market-development activities by associations in this sector through the forest industries NST (IC, DFAIT, other federal agencies, provincial governments and industry);
- encourage the development of tripartite market-development efforts for value-added wood products for offshore markets in the United States, Europe and Japan, where market opportunities exist (IC, DFAIT);
- continue to maintain the direction and advice of existing market-development agreements (IC, DFAIT); and
- pursue opportunities arising from international trade agreements by encouraging industry promotional activities in developing Asian and Mexican markets (DFAIT, IC).

To provide greater wealth creation and employment opportunities, particularly in small and medium-sized value-added manufacturers in Canada, the federal government will:

- support promotional program activities involving both commodity and value-added wood products (DFAIT, IC);

- focus existing market intelligence and trade-development activities on key priority markets (DFAIT, IC);
- build on the technical advantages of the Canadian residential-building systems, particularly in earthquake-prone market areas (IC, DFAIT);
- improve federal/provincial co-operation in international market-development, information transfer and investment sourcing by increasing the use of existing consultative committees (IC, DFAIT);
- promote strategic alliances between Canadian companies and foreign investors who are interested in joint venturing in Canada (IC, DFAIT);
- promote forestry, and pulp and paper equipment, supplies and services by targeting opportunities in key market areas that require joint-venture, turnkey or integrated-systems-approach projects; and
- continue to provide support for marketing initiatives that promote Canadian machinery and engineering support capabilities in key market areas (NRCan, IC).

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HEALTH INDUSTRIES

The Medical Devices Sector

This sector is made up of firms that provide a wide range of products used for diagnosis and treatment of ailments, including: medical, surgical, dental and veterinary equipment; orthopaedic appliances; prosthetics; electro-medical equipment; as well as diagnostic kits, reagents and equipment.

Main Challenges

- Regulatory: cost recovery, new risk-based system, pending ISO 9000 series requirements;
- Mature versus developing markets: a judicious balance is needed between efforts directed toward these two types of markets;
- Domestic market acceptance: greater domestic market endorsement for innovative Canadian products would give greater credibility in international markets;
- Access to resources, including partners, for joint ventures and other types of strategic alliances to develop and exploit technology and penetrate foreign markets;
- Attracting and retaining investment capital/value-added mandates;
- Knowledge of market opportunities and potential distribution channels, particularly in emerging markets.

Strategic Direction

- Regulatory: Develop an efficient, internationally competitive regulatory system; maximize reciprocity and harmonization with major trading partners; promote industry adoption of quality systems standards; provide information and training on foreign regulatory requirements.
- International marketing: Develop comprehensive information on Canadian capabilities and promote these capabilities in international markets; provide Canadian firms with information on international opportunities.
- Strategic partnerships: Facilitate partnering within Canadian industry and with foreign firms as a means to be more competitive in capturing international business.

- Investment: Introduce Canadian small and medium-sized enterprises (SMEs) to sources of investment capital; promote "greenfield" investment from abroad and enhanced investment by multinational enterprises (MNEs) already operating in Canada through greater marketing of Canadian advantages.

The Pharmaceutical Sector

Major segments within the sector include: multi-national subsidiaries, generic drug manufacturers (and the related fine chemicals industry), firms developing innovative bio-pharmaceutical products, firms undertaking research on a contract basis, non-prescription drug manufacturers, distributors, and drug information processing/informatics companies. Canadian universities and academic centres also play a pivotal role in the research activities of this sector.

Main Challenges

- Regulatory: greater international harmonization; faster approvals; harmonized approval processes within Canada (including provincial formularies and drug schedules); ensuring the operation of a rules-based international regulatory regime; balancing international obligations and commitments under the World Trade Organization (WTO) and the North American Free Trade Agreement (NAFTA) with the need to maintain a supportive domestic policy environment; need for certainty regarding intellectual property rights;
- International marketing: need for more timely and reliable information on foreign markets (e.g. on regulatory framework, business climate, competition); greater awareness of foreign market opportunities and risks; improved exposure of Canadian capabilities; international need for integrated systems on medicines and medicine use;
- Strategic partnerships: need for corporate alliances for small companies;
- Investment: need for greater understanding of corporate investment decision making, both foreign and domestic, and of individual corporate strategies for growth and change.

Strategic Direction

- Regulatory: Support efforts to improve the international competitiveness of Canada's regulatory environment; pursue mutual recognition agreements, memorandums of understanding and other arrangements for improved market access; provide information on regulatory climate of international markets.
- International marketing: Promote Canada as a source of a wide variety of high-quality drug products, particularly lower-cost generic drugs, and Canadian expertise in drug-information management and related information technology design; provide timely information on emerging opportunities and foreign business practices; develop mutually beneficial opportunities through foreign aid streams.
- Strategic partnerships: Stimulate collaboration between the public and private sectors in pursuing international opportunities, and between Canadian SMEs and international pharmaceutical firms for joint research and development (R&D) and contract manufacturing; increase co-operation with provincial governments to ensure that firms enjoy timely support in pursuing opportunities.
- Investment: Promote Canadian pharmaceutical R&D capabilities, and favourable investment environment to foreign firms; provide support to Canadian subsidiaries in their pursuit of enhanced mandates.

The Health-Services Sector

This sector is composed primarily of SMEs providing services, on a commercial basis, in the following categories: health administration and consulting; institution and facilities management; continuing medical education; health telematics/health informatics/telehealth; architectural and design services; clinical services; health insurance.

Main Challenges

- Project financing: need for capital to fund projects; determining how to offer competitive financial terms in project bidding;
- Market intelligence and contacts: need for increased awareness of information sources and support services; greater understanding of key decision points in the marketplace; increased knowledge of competitors; determining appropriate niche markets to pursue;

- Partnering: finding and consolidating strong, strategic, partnering arrangements to help individual firms to capture and execute projects;
- Investment: attracting investment to facilitate growth of export capacity.

Strategic Direction

- Project financing: Provide enhanced and better co-ordinated information to industry and among Canadian industry players in order to identify and co-ordinate sources of funding.
- Market intelligence and contacts: Provide information to industry on export issues such as development of foreign-market opportunities, strategies for capturing international financial institution (IFI) opportunities, and partnering.
- Partnering: Develop mechanisms to facilitate strong strategic partnering arrangements domestically and abroad.
- Investment: Develop information on Canadian capabilities in health services for use by missions abroad for marketing of services and for investment attraction.

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INFORMATION TECHNOLOGIES AND TELECOMMUNICATIONS

The information technologies and telecommunications (IT&T) sector includes the following subsectors: telecommunications equipment and services; computer hardware, peripherals and electronic components; software products, computer services and multimedia; and geomatics.

Main Challenges

The main challenges facing IT&T industries are export preparedness, investment and financing, and trade planning and co-ordination. Specific objectives have been set for the sector, and for each of its subsectors, to address these challenges. The objectives are stated in the respective subsector plans and reflect each subsector's particular dynamic.

Export Preparedness

- Given the global nature of the industry and the dominant role that small and medium-sized enterprises (SMEs) play, it is important that Canadian SMEs achieve export success; be aware of the opportunities in U.S. and world markets; be knowledgeable of the potential in high-growth markets, particularly those in the Asia-Pacific region; and have access to those markets.

Sector objectives are to:

- expand the number of export ready and successfully exporting firms, particularly SMEs, by 5 percent per annum; and
- increase Canadian exports to high growth non-U.S. markets by 30 percent while maintaining current market share.

- It is imperative to increase Canada's share of world trade. Exporting is crucial to the survival of companies in this sector, particularly SMEs, and to creating jobs. By expanding the market, industries become less dependent on the U.S. market, if warranted in a particular subsector.

Sector objectives are to:

- increase annual exports by 10 percent per annum; and
- increase the non-U.S. share of annual exports from 22 percent to 30 percent by 1999.

Investment and Financing

- Investment in IT&T is crucial to competitiveness. There is fierce competition among countries to attract foreign direct investment. Canada's main challenge is to effectively promote its capabilities, educated work force and favourable low corporate tax rate. There is a particular need to attract investment to the electronic components industry.

Sector objectives are to:

- increase foreign direct investment in Canada's IT&T sector by 5 percent.

- Canadian companies must also be aware of international financing mechanisms. Deregulation in the telecommunications industry has created new opportunities to establish partnerships and to take equity positions in privatized telecommunications organizations around the world. There is a trend toward projects that involve different industries of this sector, and these projects have special financing needs.

Trade Planning and Co-ordination

- Partnerships among the stakeholders will strengthen trade planning and co-ordination. The National Sector Team (NST) needs to integrate the contributions of all key players, industry, the provinces and the federal government. There should be synergy among the activities of all stakeholders to ensure maximum impact on world markets. The network of missions abroad should work effectively with Canadian companies.

Strategic Direction

The government, in co-operation with industry and the provinces, will:

- train potential and new exporters; provide advice relating to trade, investment and technology alliances; encourage companies to pursue ISO 9000 accreditation; provide leads and contacts in world markets; promote use of the International Business Opportunities Centre (IBOC); and use government web sites, such as Industry Canada's Strategis (<http://strategis.ic.gc.ca>), to effectively disseminate information.
- conduct IT&T sector competitive analysis; identify and compile new information about Canadian capabilities; develop and distribute materials to promote Canadian capabilities abroad; and provide supply-side market intelligence.
- develop IT&T market intelligence; develop profiles and action plans for priority countries; effectively disseminate information about international business opportunities; and organize partnering, financing and market opportunities seminars.
- emphasize the following priority markets: the United States; Asia-Pacific countries (including China, Korea, Japan, Taiwan, Thailand, India, Malaysia, Philippines, Indonesia, Pakistan and Vietnam); Latin American countries (including Mexico, Colombia, Brazil, Chile, Argentina and Venezuela); the European Union; Ukraine; Poland; the Middle East (including Saudi Arabia); and Africa (including South Africa). Priority markets may vary from one subsector to another. For example, the U.S. is a mature market for telecommunications but a growing one for software. Asia-Pacific is a high-growth market for most subsectors but less so for software.
- establish and enhance contacts with international business partners by: participating in key international shows; co-ordinating incoming missions and visits; providing high-level support to key events; providing support to key domestic trade shows and conferences; and organizing partnering missions to specific regions and countries.
- develop and enhance bilateral relations in key markets using existing bilateral Science and Technology Co-operation Agreements, by promoting technological alliances and strategic partnerships, and by disseminating information about partnering opportunities.
- ensure that Canadian companies have access to world markets through trade negotiations: reduce existing trade and technical barriers; make markets more accessible by negotiating mutual recognition agreements (MRAs); implement the telecommunications provisions under the North American Free Trade Agreement (NAFTA); help domestic certification bodies to acquire international accreditation; support trade negotiations, such as the Asia-Pacific Economic Cooperation (APEC) forum, the World Trade Organization (WTO) and the Inter-American Telecommunications Commission (CITEL), aimed at improving access to priority markets; publish a compendium of market access issues for specific regions or countries based on interviews with Canadian IT&T equipment and service providers; and deal effectively with international intellectual property and copyright issues existing in international markets.
- promote Canada as a competitive investment opportunity; establish teams to support specific investment objectives for each subsector; prepare investment strategies and plans; support investment attraction and promotion missions; encourage established companies to expand in Canada; and increase investment in the micro-electronics industry by encouraging foreign MNEs to build semiconductor facilities in Canada.

- co-ordinate efforts with industry and academia to attract, retain and expand a quality, knowledge-intensive work force.
- help Canadian companies to work with international investment organizations and to use their funding mechanisms by organizing cross-country briefings on international financial institutions (IFI) processes and opportunities; help Canadian SMEs to find global partners; provide access to and electronic distribution of published IFI-financed project opportunities; and organize seminars on finance and market access strategies.
- provide training to foreign telecommunications sector decision makers through the Telecommunications Executive Management Institute of Canada (TEMIC) and other organizations; provide courses to foreign telecommunication organizations on spectrum management; establish information and personnel exchanges in areas such as policy, regulations, and research and development (R&D); establish links with the Canadian International Development Agency (CIDA) for development projects; and recruit Canadian experts for International Telecommunications Union (ITU) and IFI projects.
- strengthen partnerships with the private sector and the provinces; collaborate with the Department of Foreign Affairs and International Trade (DFAIT) to develop *Canada's International Business Strategy* (CIBS) and action plans for IT&T; co-ordinate government efforts through the IT&T National Sector Team; identify joint initiatives, funding and deliverables with other federal government departments such as DFAIT, CIDA and EDC (Export Development Corporation), the provincial governments and the private sector; and establish performance measures.

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METALS, MINERALS AND RELATED EQUIPMENT, SERVICES AND TECHNOLOGY

This strategy covers ferrous and non-ferrous industries, including coal and industrial minerals. Part 1 deals with exploration, mining and production of base metals and minerals. Part 2 covers the steel industry, while Part 3 deals with production of aluminium and aluminium goods. Related services, equipment and technology are covered in Part 4.

Part 1: Exploration, Mining and Production of Base Metals and Minerals

Canada's metals and minerals industry is a world leader in the exploration, production and export of metals and minerals, their products, and related services.

Main Challenges

The leading international issues for Canadian industry include:

- increasing competition from other countries, particularly those in Latin America, for investment capital for exploration and mine development;
- market access restrictions, especially those deriving from international environmental, health and safety regulatory activities;
- further trade liberalization, including World Trade Organization (WTO) accessions and regional trade agreements;
- market transparency and intelligence;
- competition from substitutes and new materials; and
- promotion of new uses and technologies, and specialty minerals.

Strategic Direction

The following elements reflect the policy approaches of the Canadian government's new Minerals and Metals Policy.

Market Transparency and Intelligence

The government, in co-operation with industry, will:

- support and promote the copper, nickel, zinc and lead international study groups, for producers and consumers of these commodities (Natural Resources Canada [NRCan], Industry Canada [IC], Department of Foreign Affairs and International Trade [DFAIT]);
- use information networks and arrange missions, where required, to obtain market intelligence on supply and technological capabilities and on investment and market opportunities (NRCan, IC, DFAIT);
- use bilateral working groups to exchange market and statistical information (NRCan, IC, DFAIT); and,
- access geoscience information on mineral deposits in other countries that may match similar undiscovered deposits in Canada, and provide intelligence about exploration potential and developments (NRCan).

Market Access

The government will promote:

- the progressive reduction in tariffs, particularly in European and Japanese markets;
- the elimination of non-tariff barriers that impede access;
- the use of existing trade-remedy and dispute-settlement mechanisms to redress unjustified health and environmental standards that restrict trade; and
- the expansion of free trade areas.

Sound Management of Metals and Minerals

The government will:

- seek to ensure that international approaches to sustainable development allow for the safe production, transportation, use, reuse, recycling or disposal of metal and mineral products and raw materials (NRCan, IC, DFAIT, Environment Canada [EC], Health Canada);
- seek to ensure that appropriate regulatory measures are implemented, based on risk management and sound science, for managing products and materials that exhibit risk factors (NRCan, IC, DFAIT, EC, Health Canada);
- promote consideration of an integrated mechanism for the sound management of chemicals, metals and minerals (NRCan, IC, DFAIT, EC, Health Canada);
- support the efforts of the WTO Committee on Trade and Environment in advancing eco-labelling and the mutual compatibility of trade and environment policies (NRCan, DFAIT, EC, IC); and
- pursue regulatory issues, through bilateral working groups and other forums such as intergovernmental commodity study groups, with countries that are important markets, competitors or potential allies (NRCan, IC, DFAIT).

Trade Promotion

The government, in co-operation with industry, will:

- provide timely, relevant and incisive market intelligence and reporting as a complement to private-sector efforts (NRCan, DFAIT, IC);
- work to raise the profile of Canadian mineral and metal products and services in traditional and new markets (NRCan, DFAIT, IC);
- organize trade missions, working with Canadian missions abroad, provinces and industry (NRCan, IC, DFAIT);

- support trade-promotion activities for minor industrial minerals with export potential (NRCan, DFAIT, IC);
- support activities to promote the use of Canadian sulphur in countries that use pyrites for the production of sulphuric acid, particularly China (NRCan, DFAIT, IC); and
- target activities to promote metals and minerals companies in Pacific-Rim countries, the Middle East, and Latin America (NRCan, IC, DFAIT).

Investment and Competitiveness

The federal government will continue to monitor and evaluate Canada's international competitiveness as a destination for investment in the metals and minerals industry.

During 1997-98, the government, in co-operation with industry and the provinces, will:

- conduct seminars and participate in international mining events to disseminate information on Canada's investment climate and geological potential, and to introduce Canadian firms to interested foreign investors (NRCan, DFAIT);
- provide intelligence to Canadian companies on exploration potential and developments in other countries (NRCan, DFAIT);
- monitor investment climate changes in countries that are current or potential major mineral producers, and assess the need to adjust Canada's domestic policies (NRCan, DFAIT);
- conduct comparative studies to evaluate the global competitiveness of the Canadian industry (NRCan, DFAIT, IC); and
- provide information on government regulatory reforms (NRCan, IC, DFAIT).

Part 2: Steel Industry

This industry sector covers three subsectors: primary steel products; steel pipe and tubes; and steel wire and wire products.

Main Challenges

Major international issues for the Canadian steel sector include:

- market-access issues, particularly trade-remedy actions, within the North American Free Trade Agreement (NAFTA) area;
- competitive pressures from producers in other countries;
- multilateral environmental activities affecting trade in steel scrap; and
- promotion of export opportunities for small and medium-sized manufacturers.

Strategic Direction

Market Transparency

The government, in co-operation with industry, will:

- participate in international organizations that follow national and world supply and demand conditions in the steel and related industries (IC, DFAIT); and
- monitor closely the prices and levels of steel imports into Canada and their possible impact on the Canadian market (DFAIT, IC, Department of Finance).

Trade Promotion

The government will:

- strive to develop electronic directories that list firms' capabilities for sourcing Canadian manufactured goods (IC, DFAIT); and
- work to produce sector-specific information products containing foreign-market intelligence reports, production and shipment data, and contacts in such markets (IC, DFAIT).

Market Access

The government, in co-operation with industry, will:

- pursue the development and implementation of amended trade-remedy laws and procedures (DFAIT, Department of Finance, IC); and
- ensure that environmental regulations are science-based, take account of the economic impact on industry competitiveness and do not create unnecessary trade restrictions (NRCan, EC, IC, DFAIT).

Investment and Competitiveness

The government, in co-operation with industry, will:

- develop sector frameworks to monitor the international competitiveness of the industry (IC);
- review elements of Canada's regulatory framework that may affect international competitiveness (IC, Department of Finance, DFAIT); and
- promote involvement in trade-related activities (IC, DFAIT).

Part 3: Aluminium Industry

The aluminium sector is made up of firms engaged in the production of primary aluminium from alumina, as well as recycled (secondary) aluminium; semi-fabricated products such as sheets, rods, cable, powders, castings, pipes and tubes; and extrusions such as profiles and automotive trims.

Main Challenges

Key challenges for the Canadian aluminium industry include:

- ensuring availability of statistical data on foreign markets;
- disseminating information on opportunities for semi-fabricated products, and on firms' capabilities in support of sourcing inquiries;
- ensuring fair market access for Canadian exports; and
- promoting additional investment and growth.

Strategic Direction

Market Transparency

The government, in co-operation with industry, will:

- support promotion of international co-operation regarding industrial and trade statistics on primary aluminium, particularly with Russia and other FSU republics (IC, DFAIT); and
- support rapid integration of the FSU aluminium industry into the world economy (DFAIT, IC).

Trade Promotion

The government will endeavour to:

- develop electronic systems for more efficient sourcing of Canadian manufactured goods (IC, DFAIT);
- develop sector-specific electronic information products (IC); and
- develop a pre-competitive marketing initiative to promote Canadian suppliers of equipment and services (IC, DFAIT).

Market Access

The government, in co-operation with industry, will:

- monitor foreign sales of aluminium products in Canadian export markets to identify possible unfair trade practices (IC, DFAIT);
- seek changes to unfair and outdated trade practices (DFAIT, IC); and
- defend Canadian interests regarding international environmental and health-related exercises that may affect aluminium trade (DFAIT, IC, NRCan, EC).

Investment and Competitiveness

The government will continue to work with industry to:

- assess Canada's regulatory framework to ensure that it has no negative impact on international competitiveness and the investment climate (IC);
- develop sector-competitiveness frameworks (IC); and
- strengthen industry associations and increase their participation in trade-related activities (IC).

Part 4: Related Equipment and Services

Canada's large metals and minerals industry has spawned a cluster of supporting enterprises that have become part of a major Canadian high-tech industry. This sector encompasses producers of mining, mineral exploration and remote sensing; processing and environmental equipment and controls; and consumable products; as well as providers of engineering; maintenance; earth sciences; surveys; analyses; transportation; software; education and training; and management services.

Main Challenges

To strengthen its performance, the industry faces the following challenges:

- addressing the issues faced by small Canadian companies, which often have insufficient resources to spread their export efforts over some 50 to 60 potential foreign markets;
- coping with a stable domestic market that provides few growth opportunities; and
- dealing with increased competition from multi-national corporations.

Strategic Direction

Trade Promotion and Market Intelligence

The federal government, in co-operation with the provinces and industry, notably the Canadian Association of Mining Equipment and Services for Export (CAMESE), will:

- identify foreign markets that offer the best export opportunities for trade promotion (DFAIT, NRCan, IC, CAMESE);
- use networks and linkages to gather information on export opportunities, industry structure and practices in priority countries, and to promote Canadian equipment and services (DFAIT, NRCan, IC);
- participate in multilateral development-aid projects, where government involvement may lead to contracts for Canadian industry (NRCan);
- showcase Canadian technologies and capabilities in domestic and international forums, and promote the export of products and services based on Canada's innovative technologies (NRCan, IC, DFAIT, CAMESE);
- assist transfer of technologies or applications to Canadian companies (NRCan);
- provide export training to smaller firms (provinces, CAMESE);
- ensure that Canada offers competitive financing packages in support of Canadian consulting firms bidding for both large foreign-mining projects as well as foreign-equipment procurement (EDC [Export Development Corporation], CAMESE, DFAIT); and
- work with industry associations to collect information on foreign markets and to encourage Canadian companies to participate in major trade shows (NRCan, DFAIT, IC).

Priority regions include Latin America (Chile, Peru, Brazil, Venezuela, Guyana, Bolivia, Argentina and Cuba), Asia-Pacific (Australia, India, Indonesia, Philippines, China), and certain countries in Africa, mostly in southern Africa.

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OCEAN TECHNOLOGIES

The ocean technology sector typically consists of suppliers of low-volume/high-value custom-engineered products and services for use in, on and beneath the oceans. The ocean technology industry does not fit into a “standard industrial” classification. There is considerable overlap with other sectors such as environmental, geomatics, defence and information technology industries.

Main Challenges

- to enhance the marketing effectiveness of the small niche firm. This includes obtaining reliable international market data, improving a firm's international networking focus and lengthening the time that a firm spends in an international market. Firms have difficulty achieving critical mass on large international projects and identifying opportunities early in the project-development phase largely because of the long lead times on projects that require up-front investment;
- to improve access to capital (e.g. venture capital, research and development [R&D] funds). There is a high degree of market risk in the industry. Because product lines and markets are so narrowly defined, slight fluctuations in demand can create volatile sales levels. Often, deep financial pockets are required to bridge these fluctuations;
- to work with appropriate agencies to reduce the level of government-sponsored competition. Conflicting and declining budgets for government operations have reduced the funding available for contracting opportunities to industry and have given rise to industrial competition from public agencies. Previously funded laboratories and departments that contracted out and transferred technology to industry have been significantly downsized and are actively looking for commercial work. This impedes the progress of private firms that need the local work and support of government to get credibility in the international marketplace;

- to work with appropriate agencies to change or remove inconsistent legislation, develop a longer-term commitment to government procurement, and develop an oceans policy that provides a long-term framework for oceans activities;
- to focus government-wide resources for greater leverage in priority markets by reducing the redundancy, increasing the focus of trade missions, and providing more specific sector studies;
- to build the size, strength and competitiveness of ocean technology firms through joint ventures, alliances and partnerships between Canadian firms and developers of technology in other countries;
- to identify and capitalize on emerging opportunities in international markets, which stem from international projects, major world scientific research projects and international agreements; and
- to work with government and other organizations to build credibility for Canadian firms and products at home, thereby making it easier to sell these products internationally.

Strategic Direction

The ocean technology strategy, developed in partnership with industry, industry associations, provincial governments and other federal departments, includes a number of initiatives designed to address the challenges of the industry and enhance international business development in the sector. These include:

- market intelligence and communication. Advanced intelligence-gathering on upcoming opportunities is critical to the industry. Helping small and medium-sized enterprises (SMEs) understand how other countries and organizations source ocean technology products is vital to sales and market penetration.

Building on existing virtual communications networks, like OceansNet, to disseminate market intelligence and encourage dialogue within the industry is important to the industry's development, as is increasing the knowledge about ocean technology firms to Canadian missions abroad and getting focussed market research from the missions. This may involve bringing key representatives from the missions to Canada to meet with the industry.

- the development of strategic alliances. It is necessary to support, focus and tailor alliances between domestic and international firms to ensure export-market penetration and technology transfer opportunities.
- international agreements. We must identify and target specific projects and programs that arise from international agreements, especially those supported by international financial institutions (IFIs), the Canadian International Development Agency (CIDA) and the EU, and work to improve opportunities for Canadian companies within those agreements.
- the encouragement of collaboration between government departments and research institutions, and industry, to purchase Canadian-made products and services. The domestic market for ocean technology products and services is very small, although still active. By using more Canadian-made products domestically, Canadian industry will receive the benefit of those sales and will be able to promote the institutional partnerships to encourage more international sales.
- flexible business networks. We must promote government industry participation in international projects through business structures such as flexible business networks.
- country-to-country co-operative arrangements. Memorandums of understanding (MOUs) between countries and between research institutions should be used to help build relationships that improve trade/market access.

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OIL AND GAS EQUIPMENT AND SERVICES

The suppliers of upstream oil and gas equipment and services produce a wide variety of machinery and services used in exploring for oil and gas, including oil sands; in drilling and servicing wells; in producing and processing oil and gas in the field; and in transporting oil and gas. The industry encompasses manufacturers of geophysical prospecting equipment, drilling rigs and ancillary tools; pumping, cementing and well-fracturing units; and dehydrators, separators, treaters and other field-processing components. The industry includes pipeline equipment and services, as well as offshore equipment and services such as wellhead modules and topside-mounted structures (i.e. lifeboat stations, flare booms). In addition, manufacturers supply custom-made equipment such as drilling rigs and field-processing units, plus a wide range of such standard products and high-volume production items as well equipment and down hole tools. The sector draws upon suppliers of a large array of other equipment, including pumps, valves, heat exchangers and pressure vessels. The basic categories comprising the services sector are pre-drilling services, including geophysical contractors; drilling services, including mud, cement, logging, testing, coring and fishing services; well-completion services, including perforating and stimulating services; work-over services, including coiled tubing and wireline services; and other services such as firefighting.

Main Challenges

- Small, undercapitalized firms lack the resources required to support extensive export-marketing activities. Their financial vulnerability during a period of industry downturn is the principal challenge.
- Many of the project opportunities are in difficult, higher-risk markets, which may have insufficient financing from traditional sources.
- It is difficult to change nationalistic procurement habits, with respect to large projects undertaken in partnership with major oil companies.
- It is challenging to identify reliable overseas partners for joint ventures, licensing arrangements, and technology-transfer agreements or strategic alliances.
- Canadian subsidiaries may be unable to obtain export mandates from foreign parents.
- Current, precise strategic market information is not readily available on international opportunities, key foreign firms, foreign markets, competitors, economic trends, technology development and trade barriers.
- More training is required in international marketing for industry executives.

Table 4: Trade Statistics (\$ million). Equipment only

	1986	1987	1988	1989	1990	1991	1992	1993	1994*
Exports	150	214	230	210	270	330	410	500	750
Imports	200	250	270	210	190	170	180	210	250

* Note: Oil and gas services exports for 1994 were \$750 million.

Source: *Industry Canada*

- Greater awareness is required of foreign market opportunities and risks.
- International marketing and sustaining lengthy project-development cycles are not cost-effective.
- Companies must become more familiar with market and business practices in global markets.
- There is insufficient international awareness of Canadian capabilities and expertise.

Strategic Direction

The key to the long-term growth of this sector is to mobilize small and medium-sized enterprises (SMEs) that are capable of providing both products and services, and to pursue market prospects in countries where Canadian firms can provide superior technological expertise.

The strategic priorities for the oil and gas technologies and services industry are shaped by the following components of international competition:

- technological expertise in certain niche markets where Canadian firms have developed a superior product;
- the availability of complementary services such as engineering and training;
- price competitiveness;
- a physical presence in the market;
- a proven international track record; and,
- environmental standards.

The long-term growth of the Canadian petroleum industry will rely on its successful expansion into countries with strong and dynamic petroleum industries.

The objective is to increase Canadian export sales of technologies and services by 15 percent over the next year.

To this end, the federal government, in co-operation with the provinces and industry, notably Petro-Trade, will:

- implement the Team Canada approach of the newly established National Sector Team (NST) for oil and gas equipment and services;
- identify and focus existing market intelligence and trade development activities in four priority markets: Commonwealth of Independent States (CIS); Asia; Africa and the Middle East; and South America (Department of Foreign Affairs and International Trade [DFAIT], Industry Canada [IC], Petro-Trade);
- encourage industry associations to develop and implement long-term export marketing strategies and activities and to strengthen their trade development activities (IC, DFAIT, provinces);
- promote strategic alliances between foreign investors in the U.K., France, Germany and the Nordic countries, and Canadian companies interested in joint-venturing opportunities in Canada (IC, DFAIT, provinces);
- use networks (e.g. NST, trade journals) to gather information on export opportunities, industry intelligence and practices in priority countries and to promote Canadian equipment and services (IC, DFAIT, Petro-Trade, Machinery and Equipment Manufacturers' Association of Canada [MEMAC]);
- provide export training (through seminars, account executives, etc.) to smaller firms to help them develop international marketing skills (provinces, DFAIT);
- monitor, through the NST, the competitiveness of financing packages offered in support of Canadian consulting firms bidding for large foreign oil and gas projects, and foreign equipment procurement (EDC [Export Development Corporation], Canadian Commercial Corporation [CCC], DFAIT);
- work with industry associations to collect information on foreign markets and to encourage Canadian companies to participate in major trade shows in order to increase Canadian exports for oil and gas equipment and services (DFAIT, IC);

- assess the potential for increased investment and technology exchanges between Canada, the U.K., France, Germany and the Nordic countries;
- provide information on foreign markets and project opportunities, with particular focus on the needs of exporting SMEs (IC, DFAIT);
- promote the participation of Canadian suppliers in energy-sector projects financed by international financial institutions (IFIs) such as the World Bank, the Asian Development Bank, etc. by:
 - identifying projects in priority markets for which Canadian suppliers and technology are well suited (DFAIT/missions, IC);
 - providing project information and tenders on a timely basis to Canadian firms and industry associations (DFAIT/missions, IC);
- promote the Program for Export Market Development (PEMD) as a source of funding for smaller firms to support increased foreign marketing efforts (DFAIT); and
- focus on value-added trade activities with SMEs (IC, DFAIT)

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PLASTICS

The plastics sector encompasses machinery and mould manufacturers, compounders, and processors that make plastic products. The synthetic resins industry is discussed because of its integral relationship with the rest of the sector, but the strategy is not proactive regarding resins.

Main Challenges

Machinery and Moulds

Export growth in these subsectors has increased over the past three years, fuelled by specialized Canadian expertise, combined with expanding worldwide demand for plastics-processing machinery and moulds. Challenges for this subsector include:

- continuing investment in advanced manufacturing technologies in order to remain at the leading edge of companies worldwide;
- building up market share in countries where they already have a solid presence; and
- making more substantial inroads into developing markets in South America and Asia-Pacific.

Plastic Products

Export growth has also been very strong in this subsector over the past three years. This trend is expected to continue as Canadian companies improve their competitive position, especially with respect to U.S. firms, by investing more heavily in leading technologies and developing the skilled work force that can effectively use these technologies. The challenges for this subsector include:

- expanding market share in U.S. markets; and
- encouraging companies with a technology advantage to be more aggressive in global markets.

Strategic Direction

The focus of the National Sector Team (NST) is on trade promotion activities to improve the export performance of Canadian plastics companies. A further benefit of increased international competitiveness is that a greater share of domestic markets will be supplied by Canadian manufacturers, rather than through imports.

Governments have a key role in providing information, advice and financial support for exporters, drawing upon the resources of our missions abroad and on the supporting network within Canada. There is a need to make the plastics industry more aware of the services and resources that exist. Equally important, there is a need to make the domestic and foreign trade support networks in governments more aware of the capabilities and potential of the plastics industry.

The types of information that industry wants, and toward which governments can contribute, include:

- foreign-market intelligence;
- information on agents and representatives in foreign markets;
- facilitating the use of financial assistance programs (e.g. Program for Export Market Development [PEMD], Technology Partnerships Canada, regional development agencies, provincial governments);
- projects and equipment packages available for tender in foreign countries;
- domestic supply capability directories;
- training sessions on beginning to export, or on becoming a more effective exporter; and
- organization of national stands to help smaller companies gain international exposure.

Machinery and Moulds

The goal of this subsector is to increase machinery exports to \$1.3 billion and moulds exports to \$1.5 billion by the year 2000 (both figures are double the 1994 value).

A survey, conducted in the fall of 1995 by The Canadian Plastics Industry Association (CPIA) and Industry Canada, identified priority countries as: Argentina, Brazil, Chile, China, Germany, Mexico, the United Kingdom and the United States.

Plastic Products

This subsector is targeting an increase in exports to \$5 billion by the year 2000 (double the 1994 value).

A 1996 survey of plastics processors revealed that most plastics companies are already engaged in export activities, and the need for export-awareness training is limited to the smallest companies in the industry. There is, however, significant demand for foreign-market research reports and information on agents and distributors in target countries. The United States is the market of prime importance to all companies, but the U.S. subregions of interest vary depending upon the company's location in Canada. Although many companies have developed markets beyond North America, there is very little commonality of interest across companies. Primary export markets include: Argentina, Australia, Brazil, Chile, France, Germany, Mexico, and the United Kingdom.

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RAIL AND URBAN TRANSIT

In establishing sector strategies for international business development activities, the focus will be on the urban transit equipment and freight railway equipment subsectors, which offer trade growth opportunities.

Main Challenges

Canadian manufacturers of mass-transit equipment have done reasonably well in the large U.S. market, despite such non-tariff barriers as the federal Buy America Act. However, significant opportunities exist to increase market penetration if these barriers are removed. The Buy America provisions of the U.S. Intermodal Surface Transportation Efficiency Act (ISTEA) require 60-percent U.S. content and final assembly in the United States. These requirements have forced Canadian assemblers of rail vehicles and component suppliers to establish an additional plant or relocate to the United States.

Canadian opportunities to participate in U.S. high-speed rail projects are also restricted by local content requirements, and will continue to be so.

In the freight rail car sector, faster depreciation rates in the U.S. than in Canada result in lower after-tax equipment costs and, thus, lower leasing rates in the United States. It is, therefore, advantageous for Canadian operating companies to source equipment from a U.S.-based leasing company. Since the U.S. lessors are, in many cases, also the manufacturers of the equipment, Canadian freight car manufacturers are at a disadvantage.

A significant challenge that remains in the sector is to involve more Canadian small and medium-sized enterprises (SMEs) in export activities. Furthermore, there is a need to diversify export markets beyond the U.S. for all rail and urban transit manufacturers.

Canadian companies are not pursuing potential international financial institution (IFI) projects at an early enough stage of development to be successful when a formal request for proposals is issued.

Strategic Direction

The National Sector Team

In 1995 the National Sector Team (NST) for Rail, Bus and Urban Transit was established to develop sectoral action plans and support policy initiatives that will enhance the sector's international competitiveness. Government and industry activities will focus on urban transit equipment, principally passenger rail cars and buses, and freight rail equipment. Significant opportunities in these subsectors can be supported with selective trade and investment-promotion activities.

Policy Initiatives

Removal of the existing U.S. non-tariff barriers would provide significant opportunities to increase market penetration, particularly for small Canadian urban-transit suppliers. The NST will support continuing efforts by the Canadian Urban Transit Association aimed at achieving a consensus on both sides of the border in favour of liberalized procurement rules. Industry Canada (IC) will continue to work closely with the Department of Foreign Affairs and International Trade (DFAIT) in the formulation of Canadian positions for future negotiations.

The NST will continue to support efforts by the Canadian Association of Railway Suppliers to seek competitive Capital Cost Allowance (CCA) provisions for freight rail cars, to match what industry perceives to be the more generous regime found in the United States. Canadian railways and leasing companies will also be encouraged to participate in a study on tax competitiveness announced by the Minister of Finance.

Trade Promotion Initiatives

To help SMEs become involved in export markets, the NST will encourage strong Canadian participation at the Union Internationale des Transports Publics (UITP) Show, a large international trade show to be held in Toronto in 1999. The NST will also encourage more participation by SMEs in consortia led by industry leaders.

Opportunities for the sale of new and used rail and urban transit equipment to Mexico and other Latin American countries will be pursued through active consultation with the NST, Canadian missions and industry associations.

The transportation sector was identified by the Task Force on IFI Procurement as a key sector for attention by the interdepartmental Capital Projects Action Team (CPAT). CPAT is a recently completed initiative aimed at focussing and co-ordinating existing government resources on a limited number of high-potential IFI opportunities where industry is exercising leadership and collective commitment. Several high-potential countries have been identified in Asia (China, Indonesia, India, the Philippines, Vietnam) and Latin America. Government and industry will continue to monitor projects to seek opportunities for Canadian manufacturers.

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The space industry consists of companies and organizations that provide products, including hardware and software, that generally form part of larger space systems, such as satellites, space vehicles, ground stations for communicating information and/or controlling space assets, and launch vehicles, including expendable and reusable rockets, space planes and the International Space Station. It also includes a range of service providers (such as geomatics and telecommunications firms) whose business activities depend on the use of space systems.

Main Challenges

Technological Leadership

- Maintain technological leadership in existing market niches and develop technological leadership in anticipated growth areas, especially in the face of foreign competitors whose research and development (R&D) activities are often heavily supported by their governments. This is crucial to continued competitiveness and access to large international projects.

Market Access and Development

- Maintain and develop access for Canadian space companies to established foreign markets, of which the United States and Europe will continue to be important, particularly in light of the economic and technological trends identified above.
- Gain access to developing markets dominated by government procurement. Countries in the Asia-Pacific and Latin America possess the greatest growth potential, as they view space as an instrument of sovereignty and national economic and technological development. The challenge is to access these foreign markets in the face of local preferences, the need for domestic spin-offs, and strong domestic and foreign competition.

- Co-operate with Canadian companies in their efforts to win foreign contracts and penetrate foreign markets.
- Establish and maintain supplier relationships with large foreign prime contractors in the U.S. and Europe, who are the principal customers for Canadian space products. The challenge is to forge and maintain supplier relationships with these foreign primes in the face of strong competition, which often comes from within the foreign firm itself.
- Join international consortia of large U.S. and European prime contractors, directly or through supplier relationships. Companies can gain access through government assistance in the form of regulatory support, by developing in-demand advanced niche technologies, and through financial participation at the front end of a program.

Intelligence

- Gain access to timely information concerning procurement and alliance opportunities, competitors' activities in priority markets, as well as analyses and assessments of long-term market, industrial and technological trends. This is particularly true for the Asia-Pacific region and Latin America.

Broadening the Export Base

- Increase the number of Canadian companies with export capabilities, thereby broadening the space sector's export base, particularly for small and medium-sized enterprises (SMEs).

Strategic Direction

The Canadian government's strategy for supporting the space industry's international marketing efforts is based upon a recognition of the structural conditions and challenges outlined above and is oriented toward:

Building Bridges for Technology Development and Leadership

- Promote better linkages within existing international co-operative frameworks (e.g. the United States, Europe through the European Space Agency [ESA] and relations with the European Union [EU], Japan) to foster the development of joint ventures, strategic alliances, and industrial co-operation between Canadian space companies and their foreign counterparts to spur the development of technological capabilities in Canada (Canadian Space Agency [CSA], Department of Foreign Affairs and International Trade [DFAIT], Industry Canada [IC]);
- Promote knowledge among Canadian companies of contract and alliance opportunities arising from the Canadian membership and participation in the ESA, and promote knowledge of Canadian companies and capabilities to ESA (CSA);
- Promote better knowledge among Canadian companies of opportunities available in the areas of earth observation and telecommunications under the recent Canada-European Union S&T Agreement and relevant R&D programs in the United States to which Canadian companies can gain access (CSA, DFAIT).

International Marketing Plan

- Maintain a marketing plan for the space sector to guide and prioritize the government's support to industry (CSA through extensive consultation with space companies and in collaboration with DFAIT, IC, Communications Research Centre [CRC], Canadian Commercial Corporation [CCC], EDC [Export Development Corporation]);
- Maintain a continuous dialogue between industry and technology-development managers within the government, in the context of this marketing plan, to help ensure that the government's technology-development and program funding is oriented toward companies' export priorities, and that it addresses the issues of technological leadership and market access (CSA).

Market Access and Development

- Establish government-to-government linkages in foreign countries in support of industrial exports to priority markets in the Asia-Pacific region and Latin America, areas in which governments are the principal customers (CSA, Canadian Centre for Remote Sensing [CCRS], CRC, IC);
- Support Canadian firms' efforts to maintain access to established markets, to gain access to developing markets dominated by governments (in particular through alliances with local manufacturers), to forge alliances with large foreign prime contractors and to gain entry into emerging international consortia. This will be achieved through strategic information; technology-development funding; export financing; procurement; the regulatory framework; promotion of Canadian capabilities abroad; and training and education (CSA with CCC, CCRS, EDC, Canadian International Development Agency - Industrial Cooperation Program [CIDA INC], IC, DFAIT);
- Foster, where appropriate, greater co-ordination and co-operation among Canadian companies in their efforts to win foreign contracts and penetrate foreign markets (CSA, DFAIT, IC);
- Work with RADARSAT International and Canadian value-added earth-observation companies to maintain Canada as the premier global commercial supplier of satellite radar imagery and information products (CSA, CCRS, DFAIT, IC).

Intelligence

- Develop long-term analyses and assessments of market, industrial and technological trends and opportunities, including reports on the space industries and activities of key countries, and distribute regularly to the Canadian space industry (CSA, DFAIT, IC);
- Distribute these analyses and assessments to technology-development managers within the Canadian Space Agency, in the context of the dialogue between technology-development managers and industry (CSA);

- Develop, in consultation with industry, better mechanisms and practices for gathering and disseminating strategic and timely information concerning procurement opportunities, strategic alliance opportunities, and the activities of the Canadian space industry's competitors around the globe, including making use of embassies and consulates in priority markets (CSA, DFAIT, IC).

Broadening the Export Base

- Continue a consultative process with the space industry's SMEs to develop support mechanisms and initiatives tailored specifically to fostering growth in SMEs' exports (CSA, IC).

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TOURISM

The tourism industry is composed of thousands of businesses that supply goods and services to business and leisure travellers, including accommodation, transportation, food and beverages, souvenirs, financial services, arts and crafts, attractions, equipment for camping, hunting and fishing, luggage, car rentals and travel management.

Main Challenges

The challenges facing Canada's tourism industry include:

- raising international awareness of Canada as a tourist destination;
- overcoming the lack of internationally competitive, innovatively packaged tourism products;
- expanding consumer demand geographically and seasonally;
- expanding product availability and capacity geographically and seasonally;
- dealing with shifting demand and limited air capacity in some overseas markets;
- increasing business opportunities for small and medium-enterprises (SMEs); and
- overcoming labour and skill shortages through effective training programs.

Strategic Direction

The main objective of the private-sector-led Canadian Tourism Commission (CTC) is to market Canada as a desirable tourist destination. The following sections outline Canada's strategic approach to specific international markets.

United States

The strategy is to increase the number of first-time U.S. visitors to Canada while maintaining a high volume of repeat visitors. Nine out of 10 Americans who visit Canada have been here before. Only a sustained, concerted public- and private-sector awareness campaign will be sufficient to meet this challenge.

As awareness of Canada as a travel destination builds in the northern states, growth markets in the central and southern states will be targeted, as will new market segments in the traditional northern region. Market opportunities resulting from improved air access will continue to be pursued.

Target market segments include retired people, the working mature (aged 55-64), middle-aged couples, selected baby-boomer segments and selected product niches such as skiing, golfing, touring and visiting cities.

For 1997, the CTC, in co-operation with the industry, will work toward achieving the following goals:

- increasing revenue by 24 percent, from \$3.71 billion in 1995 to \$4.6 billion;
- increasing the number of visits (person-trips) by 14.4 percent, from 11.1 million in 1995 to 12.7 million;
- maintaining average per-day spending of \$98 to \$100 per visitor;
- increasing long-haul airplane traffic by 10 percent, from 12.5 percent of total leisure visits in 1995 to 13.8 percent;
- obtaining \$19 million in partner funds from the public and private sectors for a tourism communications program; and
- obtaining a response of 6 percent and a conversion rate of 25 percent on partnered direct-mail communication products.

Europe

The strategic emphasis will be on improving consumer awareness of Canada as a preferred destination. A revitalized image of the country will be promoted, aimed directly at targeted customer segments in the United Kingdom, France and Germany. In secondary and developing markets, the focus will be on expanding distribution networks and consumer awareness of Canada's diverse product offerings.

An innovative "infomercial" television campaign was undertaken in France in the spring of 1995; the success of this venture can be measured, in part, by the tremendous number of callers who responded to the toll-free number featured on the ad. By the end of the three-week campaign, over 50 000 calls had been received.

Consumer promotions are on the rise in all markets; investments are being doubled and many non-traditional partners are being involved to reach wider audiences with the message. An example of this type of partnering was the six-month promotion with the giant and prestigious department store "Le Printemps" that was held in Paris to showcase Canada. Another example was the week-long promotion conducted in November 1995 in Dusseldorf at Schadow Arkaden — Europe's award-winning new shopping mall. The success of these projects is measured not only in the enormous exposure Canada received, but also by our partners' willingness to repeat this type of event in the future.

For 1997, the CTC, in co-operation with the industry, will work toward:

- increasing receipts by 11.7 percent to reach \$2.68 billion;
- increasing overnight visits by 8.5 percent to reach 2.5 million;
- increasing overnight visits during the winter and shoulder seasons by 10.1 percent to reach 1.4 million; and
- obtaining \$19.5 million in partner contributions for the implementation of the European marketing program.

Asia-Pacific

Recognizing the maturity level of each market, the Asia-Pacific program will aim at increasing awareness and sparking consumer and trade interest in Canada as a travel destination, using thematic clusters of products and experiences for a better product-market match.

Japan will continue to receive the major marketing investment, with the largest effort being targeted at consumers. Enhanced efforts will be required to fully capture the growth potential of the secondary markets (Australia, South Korea and Taiwan). The focus will be on consolidating distribution networks and triggering the interest of consumers for specific Canadian products and experiences.

Given the emergence of new high-potential markets in Asia, seed funds will be allocated to improve the Canadian industry's knowledge of the consumers, build an adequate line of Canadian products and develop Asian awareness of Canadian products. Further development of the secondary and emerging markets will expand Canada's base in the Asia-Pacific market and decrease concentration.

The 1997-98 program will continue to be a comprehensive and integrated partnership marketing program, incorporating sufficient flexibility to accommodate stakeholder interest in various markets and product lines. New products will be introduced, keeping in mind the need to avoid eroding demand for existing popular products while shifting demand toward available capacity in both peak and off-peak seasons. Marketing partnerships will be formed to tailor tourism products to match customer needs.

Target market segments include female office workers aged 20-29, "fullmooners" (couples, aged 45-59), families, incentive niches (students, businesses), honeymooners and selected product niches such as skiing.

For 1997, the CTC, in co-operation with the industry, will work toward:

- increasing revenue from Asia-Pacific markets to \$2 billion, an increase of \$500 million from 1995. More specifically, revenues from priority markets are forecast to increase as follows: Japan by 14 percent, to \$867 million; Australia by 11 percent, to \$170 million; Taiwan by 20 percent, to \$196 million; and South Korea by 20 percent, to \$189 million;

- increasing overnight visits from the Asia-Pacific region to 1.7 million, an increase of 11 percent from 1996; and
- obtaining \$8 million in partner contributions for the implementation of the Asia-Pacific marketing program.

Business Travel

The marketing program to the United States will involve an integrated mix of targeted, direct-response advertising; direct mail; relationship marketing; promotions; direct selling and account management. Central to the medium-term strategy is the inauguration in 1996 of the database development project, anchored by outbound tele-research to identify, qualify and profile potential meeting buyers in the United States.

The strategies are to:

- put Canada front and centre in the U.S. meetings and incentive travel market;
- expand the client base in the United States for Canadian suppliers;
- institute a more aggressive relationship marketing approach;
- establish brand identity for Canada in the meetings and incentive travel market; and
- continue the emphasis on partnerships, including development of off-season opportunities.

Target market segments include association meetings and conventions, corporate meetings and incentive travel.

For 1997, the CTC, in co-operation with industry, will work toward:

- increasing total U.S. business travel receipts by 7 percent to \$1.25 billion, an increase of \$158 million over 1995;
- increasing the volume of overnight business travel arrivals from the United States by 7.3 percent to 2.066 million person-trips; and
- achieving a CTC-to-partner funding ratio of 1:1.06.

Marketing Projects

The CTC is currently in the process of developing the operational plan for 1997-98, in consultation with the industry and the provinces. The plan's objectives are to bring as many tourism interests as possible under a common marketing umbrella.

For a comprehensive list of the marketing projects that the CTC will undertake in 1997-98, or to obtain information on partnerships, please communicate with one of the contacts identified below.

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